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ABSTRACT

This institute was designed to study the needs and problems of vocational teaching in metropolitan areas and to recommend model teacher preparation practices. A total of 60 participants, representing 23 states, Washington, D.C., and the Virgin Islands, took part in this program, which consisted of general sessions, homogeneous and heterogeneous small group sessions and a field trip to an inner city program. The general conclusion was that there is need for great flexibility and breadth in teacher requirements, certification, and preservice and inservice education. Recommendations include occupational experience for guidance personnel, guidance courses for vocational teachers, vocational courses for all teachers, flexible curriculums and methodologies in the areas of sociology and psychology, and that colleges and universities should provide a vocational-technical teacher preparation program which extends beyond the confines of its classrooms. (GEB)

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FINAL REPORT

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Improving the Preparation Of Professional Personnel For Vocational Education In Metropolitan Areas

VOLUME VII

Part of Short Term Institutes for In-Service Training of Professional Persons Responsible for Vocational-Technical Education in Eastern Metropolitan Areas

DR. HERBERT RIGHTHAND
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200 Bloomfield Avenue
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February 1971

Sponsored and Coordinated by the Division of Vocational Education,
College of Education, Temple University, Philadelphia, Pennsylvania

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Final Report

Project Number 9-0535
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IMPROVING THE PREPARATION OF PROFESSIONAL PERSONNEL FOR VOCATIONAL EDUCATION IN METROPOLITAN AREAS

VOLUME VII

Part of
Short Term Institutes for In-Service Training of
Professional Persons Responsible for Vocational-Technical
Education in Eastern Metropolitan Areas

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Philadelphia, Pennsylvania

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U. S. DEPARTMENT OF
HEALTH, EDUCATION AND WELFARE

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National Center for Educational Research and Development

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FOREWORD

The problem of preparing teaching personnel for vocational education in metropolitan areas is critical if education is to serve the urban areas more effectively. Despite the mechanistic learning devices and techniques, the teacher-pupil relationship is the key factor in providing meaningful educational programs. By design and careful selection the participants at the Institute were concerned professionals who came from various educational and geographic backgrounds. Their active participation in the deliberations of the Institute is the primary factor that led to the significant body of recommended changes and strategies geared to the improvement of the preparation of vocational teachers.

In addition to the contributions of the participants and the resource personnel, special acknowledgement must be made of the work of the recorders, Sidney Cohen, Constance McKenna, Virginia Vespoli, and Richard W. Whinfield, who found themselves playing many roles in the conduct of this program. Credit for the smooth operation of this Institute must be given to Douglas M. Fellows who, as Co-Director, arranged for an excellent facility at the University of Hartford which contributed to a climate conducive to professional effort.

The final evaluation of any program lies in the implementation of the recommendations. It is hoped that the participants will be able to affect some of the desirable changes indicated in this report and it is also hoped that educational systems not represented at this Institute will avail themselves of these findings and make use of them in their programs.

Herbert Righthand
Assistant Director
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of Education

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SUMMARY

GRANT NUMBER:	OEG-0-9-480535-4435(725)
TITLE:	Institute Number V, Improving the Preparation of Professional Personnel for Vocational Education in Metropolitan Areas - one of Ten Short Term Institutes for In-Service Training of Professional Personnel Responsible for Vocational-Technical Education in Eastern Metropolitan Areas.
INSTITUTE DIRECTOR:	Dr. Herbert Righthand, Consultant
INSTITUTION:	University of Hartford 200 Bloomfield Avenue West Hartford, Connecticut 06117
DIRECTOR OF INSTITUTES:	Dr. C. Thomas Olivo, Professor Division of Vocational Education College of Education
SPONSORING INSTITUTION:	Temple University Philadelphia, Pennsylvania 19122
TRAINING PERIOD:	June 15, 1970 to June 19, 1970

Problem

A democratic nation bears the responsibility of providing an educational system which serves the young and the old, the advantaged, the disadvantaged, and the "in-between." Congress has recognized vocational education as a means by which this responsibility can be met and has provided increased support and extended the scope of vocational education. Vocational educators are cognizant of the problem faced as a result of this broadened scope, as well as the continual demand of improving, modifying, and "up-dating" programs. The teacher is the key factor in the development of effective programs and it is this problem of preparing a competent, motivated, and concerned vocational teacher that was faced by this institute.

Objectives

The objectives of this institute were to study the needs and problems of vocational teaching in metropolitan areas and to recommend model teacher preparation practices which will tend to meet these needs. The outcomes sought were:

Determination of teacher manpower needs and recommended teacher requirements.
Delineation of skills and understanding necessary for effective teaching.
Development of model pre-service curricula.
Identification of in-service activities and programs essential to the improvement and "up-dating" of vocational teaching practices.
Recommendation of model relationships between metropolitan school systems, the State departments of education, and teacher training institutes.

Procedures

A total of sixty participants took part in this program. There were eighteen representatives from metropolitan educational agencies, twenty-nine from teacher education institutes, ten from State departments of education, and three from the United States Office of Education. This representation covered twenty-three states, Washington, D. C., and the Virgin Islands The occupational roles of the participants included city superintendents, principals, directors of teaching personnel, coordinators of vocational programs, college instructors, and college administrators.

The program consisted of general sessions, homogeneous and heterogenous small group sessions and a field trip to an inner city program. The resource consultants through their presentations at the general sessions and their participation at the small group meetings provided an input of information and problems as well as indicating their ideas of possible approaches to these problems. The groups formed on the basis of similar occupational roles identified the teacher education needs, while the restructured small groups with representation from various occupational roles dealt with these problems and sought to identify appropriate strategies and plans of action.

Conclusions and Recommendations

The general conclusion arrived at by the participants is the need for greater flexibility and breadth in teacher requirements, certification, and pre-service and in-service education.

There should be diverse ways of entering the teaching field for professional and para-professional personnel in vocational education in order to enable schools to employ teaching personnel with essential occupational experience and skills, greater understanding of the community problems, and better empathy with the students from the inner city.

Certification requirements should be based on teaching effectiveness and should vary with the particular vocational teaching assignment. Job analysis should be the basis of setting teaching and certification requirements.

Though opinions varied as to the extent of work-experience essential for teaching skills, there was agreement that "live" experience is necessary and that this experience should be evaluated through competency examination (coordinated through a national consortium) and that college credit be given for this experience. The value of work-experience after employment was stressed and recommendations were made that this "up-dating" experience be credited towards final certification and graduate study.

Cities, communities, business and industry should play a more active role in determining teacher qualifications and pre-service and in-service education. Closer relations between teacher training institutions and State departments of education are vital for improved teacher preparation.

Colleges and universities should provide a vocational-technical teacher preparation program which extends beyond the confines of its classrooms. The program should consider work-experience, field experience in metropolitan areas, and carefully structured internships as a basic aspect of pre-service and in-service programs.

Flexible curricula and methodologies are necessary to provide breadth in the areas of urban sociology and psychology and other subjects which can lead to a better understanding of the problems of the inner city. At the same time it was emphasized that vocational teacher educators should be involved in the curriculum development of the general subjects so that these subjects do not become too "academic" and lose relevancy to the future or present occupational teacher.

Continuous education through broad and flexible in-service programs must become basic to effective teacher preparation. Consistent with this strategy, there is need for providing incentives to vocational teachers through scholarships, fellowships, sabbaticals, and financial rewards. Vocational teachers lacking degrees should be encouraged and provided assistance in obtaining a degree.

Other recommendations included occupational experience for guidance personnel, guidance courses for vocational teachers, vocational courses for all teachers, research courses for vocational teachers and exploration of techniques used by the Teacher's Corps and the Training Teachers of Teachers program. Research on the value of work experience and continued study of more effective curricula and methods of preparing teachers was recommended.

A six-month follow-up revealed that specific actions and plans from the institute deliberations were in the areas of extensive dissemination of the institute recommendations: continued study and investigation of the identified problems: and modifications in teacher education, personnel practices, and certification requirements.

Section I

INTRODUCTION

A democratic nation bears the responsibility of providing an educational system which serves the young and the old, the advantaged, the disadvantaged, and the "in-between". In this society education must not be limited to the educationally or financially elite; it must also serve the handicapped, the poor, the racial minorities and the academically deficient. There people are found throughout the nation, but are generally concentrated in the urban areas. They seek an educational system which will be relevant and meet their needs, a program of studies which can lead to a good life. It is impossible for them to enjoy the good life when they are limited to a marginal existence level. Education must provide them with the tools and skills essential for employment so that living in a democratic society can be more than just a struggle for existence.

The Vocational Education Act of 1963 and the Amendments of 1968, as passed by Congress recognize the need for greater emphasis on vocational education and for the need of extending vocational education in order to serve these disadvantaged groups. The United States Office of Education, recognizing the need for implementation of the goals set forth in the Vocational Education Act, has provided support for several series of institutes to deal with these problems. One of these series of institutes consisted of ten short term institutes serving the metropolitan areas of the states east of the Mississippi, Washington, D. C., and the territories of Puerto Rico and the Virgin Islands. These institutes sought through the involvement of leaders and decision-makers from the metropolitan areas, education, and the community to develop strategies and techniques which would improve vocational education and training.

The institute, "Improving the Preparation of Professional Personnel for Vocational Education in Metropolitan Areas," was one of these ten and as the title indicates was concerned with the preparation of teachers who could more effectively serve the youth and adults of the metropolitan areas through a meaningful vocational education program. Vocational programs have been criticized, sometimes justly and sometimes unjustly, however, there can be no question that changes in the impact of vocational education require changes in the preparation of professional personnel. There have been many technological changes in education; despite the innovative techniques of computer-instruction, micro-teaching, programmed learning, etc., the well-prepared, motivated and concerned teacher is the key to a successful educational program. All the technological trappings and all the computers will fail unless the teachers have the human understanding and the pedagogical "savvy."

It was the need for modification and "up-dating" teacher preparation that was the underlying theme of this institute. The primary objective was to study the needs and problems of vocational teaching in metropolitan areas and to recommend model teacher preparation practices which will tend to meet these needs. The specific outcomes identified for this institute were:

Determination of teacher manpower needs and recommended teacher requirements.

Development of model pre-service curricula.

Delineation of skills and understanding necessary for effective teaching.

Identification of in-service activities and programs essential to the improvement and "up-dating of vocational teaching practices".

Recommendation of model relationships between metropolitan school systems, the State departments of education, and teacher training institutes.

The charge presented to the participants of this institute was to respond to the question:

What changes are needed to improve the quality of teacher preparation so as to serve the students of vocational education more effectively?

In dealing with this question and in seeking the outcomes indicated above, the goal set forth was not only to benefit the participants and the agencies they represent but through the dissemination of the findings and recommendations to provide meaningful ideas to those not present.

Section II

METHODS

In order to deal with the goals of the institute, it was necessary to provide an environment in which concerned and knowledgeable educators could meet, and with the aid provided by resource people, tackle these specific challenges and seek out strategies which could lead to resolution of the problems (See Appendix A). A key factor in the effectiveness of such an institute is in the caliber and character of the participants (See Appendix B).

Participants

It was apparent that if changes in professional preparation were to be developed, representation from the teacher educational institutions was essential. However, in order to provide these participants with a first-hand understanding of the teacher problems faced in the metropolitan areas, it was essential that representation from these groups be obtained. The third group of participants vital for effective interchange and discussion were the vocational teacher educators and leaders representing State and Federal agencies. There were eighteen (18) representatives from metropolitan agencies of which fifteen(15) were from cities with populations over 100,000. Teacher education institutions were represented by twenty-seven (27) participants plus two graduate students. The third group consisted of ten (10) from State Departments of Education and three (3) from the U. S. Office of Education.

Twenty-three (23) states, Washington, D. C., and the Virgin Isalands sent participants to this institute. Practically all participants were in positions of responsibility where decisions of change can be made or initiated. The participants included school superintendents, principals, directors of teaching personnel, coordinators of vocational programs, college instructors, and college administrators. Eleven (11) of the participants were not specifically identified as vocational educators,but had responsibilities which included the professional preparation of vocational teachers.

The diverse professional backgrounds of the participants made it possible to approach the problems with a broad perspective and exposed many of the participants to fresh viewpoints.

Resource People

Resource people were used in two ways; as speakers who met with the total group, and as consultants who sat in and participated in the small group discussions. Their role was to provide the specialized knowledge and insight which their experiences had provided. The consultants were selected on the basis of their experience in teacher preparation or city, state, and Federal roles (See Appendix B). In addition to participating at the general sessions, all consultants took part in the workshops and most played dual roles by staying on for several days or the full week, taking part as participants.

Small Group Sessions

The small group sessions represented the work aspect of the institute. It was here that the data and understandings contributed by the participants and added to by the resource people were used as a basis for discussion, for the identification of problem areas, and the development of strategies.

The workshop meetings on the first day were structured homogeneously according to the participant's role in vocational education. This resulted in two groups representing colleges and universities, one group representing local educational agencies and one group consisting of personnel from State and Federal agencies. The goal set forth for these four groups was to identify the problems encountered in the utilization, preparation, and development of professional staff in vocational education. The specific areas for discussion were:

Personnel shortages
Quality of preparation
Certification requirements
Relevance of preparation to problems
  of urban areas
Teacher obsolescence
City-State-College relations
Ancillary services (research, curriculum
  development, internships, etc.)

In summary, these groups, meeting on the first day and working with their colleagues with similar backgrounds, were asked to identify problem areas which would then provide a frame of reference for the subsequent sessions of the restructured work groups.

The workshops held on the next three days were organized so that representatives from various aspects of vocational education had an opportunity to discuss the changes needed in the professional preparation of vocational teachers. These groups were cognizant of some of the problems identified by the first day "In-Group" workshops and had the opportunity of listening and reacting to the challenges and information presented by the various consultants.

Since the presentations of the speakers provided vital data respective to the three workshop topics discussed, a rotating schedule of workshops was followed. The schedule of discussions is indicated in the program (See Appendix A)

The workshop group approached each topic with the question:

> What changes are needed to improve the quality of teacher education so as to serve vocational education more effectively?

Within the framework of this objective, three topics for discussion were identified; namely, teacher requirements, pre-service and in-service education. The restructured heterogeneous work groups were aware that these broad topics were arbitrary and undoubtedly would lead to some overlapping in the discussions and in the findings. In order to provide a framework for approaching these major topics the following sub-topics were suggested for consideration:

Topic 1

Vocational Teacher Requirements

(a) Employment standards
(b) Certification
(c) Work experience
(d) Academic requirements
(e) Use of teacher aids
(f) Use of minority representatives
(g) Role of state, city, and college in developing effective teaching
(h) Competency tests as an employment tool
(i) Administrative opportunities for vocational teachers
(j) Use of associate degree graduates

Topic 2

Pre-Service Programs

(a) Professional education courses, guidance, urban problems, etc.
(b) Professional vocational education courses, cooperative education, methodology, etc.
(c) Academic courses
(d) Credit for work experience (all fields)
(e) Competency tests
(f) Practice teaching, interships, cooperative work study

Topic 3

In-Service Programs

(a) Graduates degree programs
(b) In-service certification programs
(c) Credit for summer industrial experience
(d) Workshops and institutes
(e) Scholarships and fellowships
(f) Tuition reimbursement or support
(g) Summer experience in ghetto areas
(h) Special updating courses: i.e., data processing, urban problems, serving disadvantaged and handicapped

The group leaders for the first day workgroups and for the subsequent workshops were chosen by the respective members. Recorders were assigned to each group and were responsible for reporting to the large group as to the position taken by each workshop. In addition, the recorders provided a summary of recommendations and findings of the groups. The fundamental output was derived from the reports of the recorders.

Field Trips

The time at which this institute was held made it impossible to visit vocational educational programs. However, it was possible to visit a Concentrated Employment Program operated in the heart of the ghetto area of Hartford. This visit had special significance since it was in this environment that teacher educators were exposed to the needs and responsibilities of teachers working with the disadvantaged. The program visited was under the sponsorship of the T.T.T. (Training Teachers of Teachers).

Section III

RESULTS AND FINDINGS

In the frame of reference of an Institute, the section "Results and Findings" deals with the identification of problems. The resource personnel while providing data relevant to their particular role in education also focused on the problems they faced (see Appendic C). Another source contributing to the findings of this institute was the report of the workshops held on the first day. This identification of problems is reported below according to source, resource personnel, and workshops.

Resource Personnel

Dr. Irving Starr, Dean of the School of Education of the University of Hartford, departed from the usual welcoming address and reflected on the need of radical changes in the teacher preparation process as practiced in colleges and universities. He urged that college credit be allowed for significant experiences in business, industry, and urban areas.

Representing urban school administrators, Mr. Lester Silverstone, Superintendent of Schools in Bridgeport, Connecticut, supported a similar position by speaking of the need for breaking away from the conventional baccalaureate program for the preparation of teachers. He indicated the need for specialized preparation for teachers who will be working in urban areas and the necessity for developing new sources of supply of teachers and effective means of recruiting and training vocational teachers.

Expansion of undergraduate and in-service programs, depth experience in the world of work and special programs for teachers of the disadvantaged were identified as necessary steps in improving teacher preparation by Dr. Byrl R. Shoemaker, the State Director of Vocational Education in Ohio. He referred to a study which reported that the work experience of a vocational teacher was a significant factor in the success of his students.

Stated from the point of view of a Head of the Division of Vocational Education, New York University, Dr. Martin Hamburger, the certification of teachers is archaic but still provides a degree of flexibility. Changes in certification should be based on changes in occupational education which, in turn, should be served by teachers capable of accepting student involvement, and able to provide necessary incentives and relevancy needed by students from the inner city. Teacher training institutions should direct themselves to this kind of preparation and "exorcise" prerequisites and course sequences.

Dr. Gordon McMahon, Chairman, Department of Vocational-Technical Education at the New York State University at Oswego, dealt with the need for more adequate pre-service preparation and on-the-job supervision for new instructors. He described the pattern of preparation in order to improve such programs.

In order to meet the needs of vocational education in metropolitan areas, teacher training institutions should not prepare "two-by-four" teachers, who teach between the two covers of a textbook and within the four walls of the room. This was the point made by the Assistant Director of the TTT program in Hartford, Mr. Robert L. Lewis, Jr. He stated that effective teachers have an interest in the students, recognize that some subjects are not relevant, develop empathy and not sympathy and know the community.

The Educational Professional Development Act can provide support for the much needed improvement in the preparation of professional personnel in vocational education. Dr. J. Ned Bryan, Bureau of Education Personnel Development of the USOE provided information concerning this act and identified some of the means by which teacher preparation in vocational education can profit from this act.

Dealing with the topic of "Preparing Teachers for Post-Secondary Programs," Dr. Durwin Hanson, Head of Department of Vocational-Technical Education of North Carolina State University at Raleigh, North Carolina, presented guidelines for the preparation of such personnel. He stated that it is imperative that in-service teacher education be considered "in tandem" with pre-service. He also offered the information that the three courses found most vital in the preparation of vocational teachers are trade analysis, methods of teaching, and the development of instructional materials.

A relevant curriculum must be presented in a relevant manner. The utilization of appropriate and well-prepared instructional materials is an essential aspect of good teaching and a responsibility of the teacher preparation institutions. Mr. Benjamin Shapiro, Director of the Vocational Curriculum Laboratory at Rutgers University in New Jersey spoke on this topic. His emphasis was on the teacher's relations with the student and the relevancy of the curriculum. He implemented his talk with examples of individual instructional materials found to be especially effective.

Dr. Robert L. Prater, the Associate Dean of the School of Industries at Texas Southern University, Houston, Texas, dealt with the contribution research made to vocational education and with the role of the teacher educator in relation to research. He reported on some of the findings of research relative to metropolitan problems. Dr. Prater felt that the teacher educator should prepare the vocational teacher as a consumer of research and also as a potential researcher.

To indicate the development and role of a Department of Vocational-Technical Education in a teachers college, Dr. Robert B. Hayes described the process at Marshall University in West Virginia. He recommended that vocational education broaden its horizon, regard itself as of the highest order and expect more from Higher Education.

Charged with the responsibility of reacting to the various presentations, Dr. William Reynolds, Director of Vocational-Technical Education at the New York State University College, at Buffalo, stated that the areas of concern in the improvement of teacher preparation can be placed in three categories: selection and admission of teacher candidates; quality of teacher education programs; and the need for research and development. Vocational teachers must be made aware that they are not training directors in industry and skill acquisition is not their sole purpose, but that the total development of the individual is also their responsibility.

Workshop Findings

The findings reported here resulted from the sessions held on the first day in which four groups met, each group structured according to the role of the participants, thus the output came from two groups of teacher educators, one group of local educators, and one group of State and Federal personnel. The problems and needs identified by these groups were often synonomous with recommendations and provided the framework for the development of recommendations for change.

Generally, it was felt that some of the problems of teacher preparation in vocational education stem from the inadequate recognition that vocational education receives. Another aspect of this problem is in the demands placed on education - - demands for which educational solutions are inadequate or inappropriate.

The need for well-prepared teachers was indicated by all groups. Special emphasis was placed on the need for improvement of techniques of recruitment, increased use of qualified teachers from minority groups and the use of personnel from business and industry. In order to obtain teachers in the fields where shortages exist, there was a need identified for the correlation of manpower projections and teacher preparation. State and Federal participants suggested an exploration of regional approaches to meet some of the problems of vocational teacher recruitment.

The workshop groups felt there was a need for analyzing the characteristics of teachers who have proven to be effective in an urban environment. All groups felt the need for experiences outside of the college for the preparation of teachers, though some of the teacher educators suggested studies as to the value of work experience. Further study is needed in order to identify the most effective methods of teaching and the various alternate approaches. At the same time, there is need for a broader and more diversified preparation of teachers of vocational subjects. Correlated with this and with the need for the determination of appropriate preparation for teachers of the disadvantaged; there is need for specialized preparation of vocational teachers who will work with the handicapped.

Problems of certification received a great deal of attention indicating the desirability of continuation of certification, but with a more flexible standard and based on teacher effectiveness rather than course work. There is an obvious need for close relationship between certification and teacher preparation and teacher in-service education. Other problems, identified primarily by the teacher educators from the colleges, dealt with the increasing administrative responsibilities placed on teacher educators and the general dearth of funds for teacher preparation.

In addition to providing a summary of the workshop recommendations, the recorders submitted an overview of the general tone and position of the respective groups (See Appendix D).

Section IV

CONCLUSIONS AND RECOMMENDATIONS

The restructured workshops attacked the problem of making recommendations and indicating strategies which could be used to resolve some of the problems identified previously. These groups were heterogeneous in make-up and utilizing the materials of the speakers, the earlier workshops, and their own experience sought to identify the changes necessary to improve the quality of teacher preparation. Their discussions were split into three categories: Teacher Requirements, Pre-Service, and In-Service Teacher Education. Though these categories were not completely independent of each other, they provided a convenient framework for discussion and summarization. The Teacher Requirements category dealt with the problems of recruitment, selection and certification of vocational teachers. Also included in this discussion was the identification of the roles of the state, Federal, city, and teacher educational agencies. The Pre-Service topic centered around the type of preparation provided a student prior to his employment as a vocational teacher, while In-Service dealt with the vital areas of continuing education for the employed teacher.

Teacher Requirements

Changes in the recruitment and selection of teachers should lead to increasing the teaching staff with professional and para-professional personnel drawn from the metropolitan areas and from minority groups. This type of personnel should provide the understanding and empathy needed to work with the disadvantaged. By the use of differentiated staffing, flexibility in employment and teaching assignment can be established and no forced equalization of personnel is necessary. In all cases, however, it is recommended that appropriate pre-service preparation be provided for the new teachers. A correlation of this recommendation is the position taken that urges that diverse ways of entering the teaching field be established.

The need for certification was generally accepted by the participants but the emphasis was placed on flexibility and the need for constant review of the standards. Certification requirements should vary with the teaching assignments and should provide for temporary or emergency certification. Certification by a college is inadequate; greater emphasis, especially in final certification, should be placed on teaching performance rather than on academic studies.

The issue of required occupational experience in the area of the skill to be taught was debated. Representatives from colleges tended to recommend research as to its value and suggested consideration of alternatives. Those engaged in vocational education had very strong feelings that part-time or simulated work experiences cannot replace the "real" work experience necessary for teaching vocational skills. Despite some of the differences indicated there was apparent agreement that work-experience is essential, that college credit should be given for such experience, and that the value or quality of this experience should be assessed by standardized competency examination.

The recommendation made in reference to competency testing was that national coordination in the development of these tests be sought. The participants also recommended exploration of screening and predictive tests in order to provide a greater degree of assurance as to the possible success of the candidate for a teaching job. Associated with testing but relevant to pre-service education was the recommendation that student-teachers be permitted to take tests in any subject, and, if passed satisfactorily, receive credit for the course without having to take it.

Cities and communities should take a more active role in identifying the qualifications of teachers and the essential pre-service and in-service preparation. Business and industry should also be involved in this process. A strong recommendation was made for closer relations between state education departments and teacher training institutes.

A recommendation was made that, in order to assess effectively and efficiently the essential qualities required of a vocational education teacher, a job analysis should be made and that the findings of such an analysis be used to set certification standards, essential work experience, and pre-service and in-service teacher education programs.

Pre-Service Preparation

The program of preparation prior to employment as a teacher, generally conducted by colleges and universities should be extended beyond the cloistered confines of these institutions. This concept permeated most of the recommendations made concerning the improvement of pre-service education. Field experiences in metropolitan areas, work experiences in business and industry, and internships should be included in the pre-service program and should be given appropriate college credit.

Once again the need for an analysis of the vocational teaching job and the setting forth of clear objectives for the teacher education program were recommended as necessary fundamentals for the development of an effective teacher preparation program. This program must be developed around the needs of the vocational student and the person preparing to teach. This requires a flexible curriculum and methodology that provides sufficient breadth in the areas of urban sociology and psychology, prepares for individualized instruction, teaches the problems of the urban areas through "on-site" and first hand experience and instills an understanding of a total approach towards the individual. Pre-service programs should provide for entry at various levels according to the age and background of the individual. Significant occupational experiences should be required of those preparing for the field of vocational guidance; on the other hand, it was concluded that it may not be necessary for vocational guidance personnel to be immersed in professional education courses which have little or no relevency to his required on-the-job skills.

The participants also recommended that (1) the professional courses most closely related to the task of teaching be offered first; (2) all teachers learn some of the fundamental principles of guidance; (3) that professional courses be relevant and meaningful to the future teacher, and that (4) teaching experience obtained through a paid position

(i.e. MDTA) be accepted in lieu of practice teaching. An essential approach in seeing that the "liberal arts" courses required for student teachers are meaningful to the vocational teacher is the establishment of communications between vocational teacher trainers and their liberal arts colleagues. If student teaching is to be effective, the total program must be carefully coordinated between student-teacher, teacher training institute, and the vocational school in which the practice teaching is taking place.

Finally, continuous evaluation of the pre-service curriculum, the qualifications of the professors and the methodology used, must be conducted and changes made as needed.

In-Service Preparation

Continuous education is being promoted as essential in all walks of life and in practically all occupations. Certainly the educator must realize that the completion of his pre-service program and his ensuing employment do not indicate a termination point of study. All teachers (even Latin teachers) must continue their studies in view of the changes in society and in the student population. The vocational teacher must face the same changing socio-economic situtation as well as the ever-changing technology in his area of occupational skill.

An in-service program must (once again) be flexible; it must not be limited to college campus courses but must include workshops and institutes dealing with educational, industrial, community, and socio-economic problems. Occupational and field experiences, and special industry training programs are vital components of an effective in-service program for vocational teachers. Changes are needed which will recognize these aspects of education and provide proper credit for them.

Vocational instructors should be offered incentives through scholarships, fellowships, sabbatical and other financial rewards. The possibility of employing vocational teachers on a full year basis and using some of the summer period for "up-dating" was recommended as a possible strategy. Vocational teachers lacking degrees should be encouraged and assisted to work toward a baccalaureate. However, the main emphasis of in-service preparation should be on working in or with business and industry, thus enabling the teacher to keep current with his skills and at the same time to maintain contact with industry.

Other recommendations for changes in in-service education were exposure to the problems of the inner city through living in or working in these areas in order to get a better understanding of their students, home visits to the disadvantaged students and the utilization of such approaches as those conducted by the TTT. Teachers should be trained in techniques of research so that they can better apply the findings and conduct research themselves. A recommendation was made that teacher educators utilize their sabbaticals to go back to vocational school programs and experience the current problems of vocational teaching. New teachers should not be thrown into a "sink or swim" situation; careful supervision and continued orientation should be provided. The techniques used by the Teacher's Corps should be explored in order to ascertain the possibility of using some of their proven techniques as an in-service training device.

General Recommendation

One recommendation made by several of the workshops and not really fitting into any one of the above categories and not specific to the vocational teacher, stated that the educational program for all teachers and administrators should include a course in vocational education or occupations. This could be a certification pre-service or in-service requirement and improve the preparation of teachers at all levels and in all fields.

Section V

EVALUATION

In order to assess the effectiveness of the institute, three different instruments were used: Institute Evaluation Form #1 (Attitude Toward Vocational Education), Institute Evaluation Form #2, (Institute Evaluation) and Institute Evaluation Form #3 (See Appendix E).

Institute Evaluation Form #1

This form contained fifty-two (52) items concerning the total area of vocational education which were administered in all of the institutes and fifteen (15) specific items, 53 through 67, which were particularly applicable to institute VIII.

An analysis of items from #V-53 to V-67 was made since these items dealt with teacher preparation. The three items which by observation showed the greatest shifting in attitude are listed below:

V-66. The rapport between the academic and vocational teachers in metropolitan cities is as good as can be expected.

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Pre-test	1	9	6	21	5
Post-test	0	5	2	30	5

Agreement with this statement was reduced from ten to five while the disagreement was increased by nine responses. The four added responses may have been drawn from the "Undecided."

V-58. The requirements for entrance to and graduation from a college or university are so academically oriented that few vocational shop teachers see the value of aspiring to earn a bachelor's degree.

	SA	A	U	D	SD
Pre-test	0	16	7	17	1
Post-test	0	24	2	14	1

This item contained sixteen changes showing an increase of eight in agreement and decrease of three in disagreements.

V-63. The administration of the metropolitan city school plan, initiate, and conduct in-service programs designed to make the entire professional instructional staff knowledgeable concerning vocational education.

	SA	A	U	D	SD
Pre-test	6	7	5	20	4
Post-test	8	9	0	23	2

Fourteen changes occurred in this item though the shifting was slight, since the major change appears to be the reduction of five undecided to zero, with four representing the increase in agreements and one the growth in disagreement.

Institute Evaluation Form #2

This form explored the individual's reaction to the program and his assessment of the value of this institute. Responses on thirty of the thirty-eight items were indicated on five categories with a scale ranging from strongly agree to strongly disagree. These items were analyzed by assigning weights ranging from +2 for a strongly favorable response to a -2 for a strongly unfavorable response with 0 being used for the undecided response. The evaluation factors obtained were all positive ranging from +34 to +73 and averaging +51.5.

Another evaluation of the responses for the thirty items referred to above was made by counting the number of favorable, undecided, and unfavorable responses and converting this to percentages based on total responses. This summary is provided below:

Summary of Responses:		
Total Favorable	1,332	
% Favorable		90.5
Total Undecided	69	
% Undecided		4.7
Total Unfavorable	71	
% Unfavorable		4.8
Total Responses	1,472	100.0%

Responses to Items 37 and 38 are shown below:

37. If you had it to do over again would you apply for this institute which you have just completed? Yes 43 No 1 Uncertain 2 .

38. If an institute such as this is held again would you recommend to your peers that they attend? Yes 43 No 1 Uncertain 2 .

The most frequent responses for Items 31 and 32 are given below:

31. As a result of your participation in this institute, what plans have you formulated which you may present through appropriate channels for consideration and action in your community either now or the immediate future? Outline briefly the key points.

Most frequent responses:

Analyze and strengthen pre-service and in-service teacher training programs to serve urban areas more effectively.

31. (Cont.) Most frequent responses:

Effect better communications between vocational teachers and academic teachers, inner city residents and policy makers.

Explore and Utilize TTT program.

Disseminate and utilize ideas obtained at institute to strengthen vocational education.

Work toward certification revision.

Re-evaluate curriculum, plan workshops, assess EPDA program, and conduct relevant research.

32. As a result of your contacts with the participants and consultants at this institute, have you decided to seek some continuing means of exchanging information with any of them? What types of information can the consultants or participants contribute that would be helpful to your work?

Most frequent responses - Continuing means of exchange of information.

Arrangements for exchange of ideas already made.
Use participant list for further contact.
Invite participants as consultants or resource people.

Most frequent responses - Types of information:

Curriculum
Staffing
Recruitment
In-service
Career Orientation

The list below indicates the most frequent responses indicating strengths and weaknesses of the institute. These were summarized from Items 33 to 36.

Most frequent responses - Strengths

Informality, opportunity for exchange of ideas and small group sessions.
Heterogenity of participants.
Planning and structure of institute.

Most frequent responses - Weaknesses

Need for more field trips.
Lack of recreational activities.
Include teachers, students, urban respresentatives and policy makers.
Too much stress on T & I.

Some interesting evaluations where differences of opinion are shown with the number of responses:

Comment	Strength	Weakness
Quality of Speakers	7	6
Housing	5	3
Too long		2
Too short		1
Field Trip (TTT)	1	2

Institute Evaluation Form III

The Evaluation Form III was sent to fifty-two of the participants in order to obtain information concerning the actions taken or planned as a result of their participation at this institute. This form was sent out six months after the conclusion of the institute and was directed to those participants who were in full attendance and who were not in directing or consulting roles. Thirty-nine returns (75%) were received and all but one provided responses.

The form (see Appendix E) listed eleven possible activities and provided for the addition of others. The respondent was asked to indicate whether he had accomplished any of these, attempted them or was planning to take some action in the near future. The bulk of the actions taken of the 119 identified dealt with different approaches to disseminating the findings and recommendations of the institute. Of the thirty-six who reported to their colleagues, ten submitted written reports. There were 12 meetings or conferences held to discuss the outcomes of this institute. Two attempted to hold such meetings and two others are planning to hold discussions on the topics of the institute.

Another area of extended communication resulted through the use of institute participants as consultants by other participants. Four have already done so, three have attempted to and eight are planning to invite other participants to their cities or college institutions.

Other accomplishments and plans are indicated below:

Action	Accomplished	Planned
Further study or investigation	10	7
Modified personnel practices	3	6
Modified teacher education curriculum	6	9
Revised pre-service teacher education	1	10
Changed certification requirements	-	6
Expanded and/or modified in-service program	4	10
Improved relationship between business and trade and industrial teacher educators.	1	-
Participated in inner city program.	1	1

In addition to the above, thirty-seven attempted actions were not fully consummated at this time. The main reason given for the inability of participants to affect changes was the limits of their position for introducing changes. Radical changes affecting certification, teacher preparation and personnel practices involve the actions of many educational leaders and it is doubtful whether any one person can really be in the position of affecting such changes.

Reasons given as obstacles to introducing changes were:

Limited funds	11
Rejection by administration	1
Little support from colleagues	8
Reconsideration or modification of change	1
Lack of time	11
Limits of your position to introduce change	25
Lack of personnel	1

The follow-up report indicates that the main accomplishments of this institute as they were reported six months later were:

1. The dissemination of the ideas and recommendations of this institute far beyond the participants. Through verbal and written reports, meetings and use of institute personnel, the strategies recommended have been presented to a broad base of educators.

2. Continued study and investigation of the problems identified is indicated.

3. Modifications in teacher education curriculum, pre-service and in-service teacher education, personnel practices, and certification requirements have been initiated and are planned for the near future.

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APPENDIX A

PROGRAM

Monday, June 15

Time	ACTIVITY
8:00	Breakfast
9:00	Registration
10:00	Introduction
	Mr. Douglas M. Fellows, Consultant for Technical Education, University of Hartford
10:15	Break
10:30	Institute Objectives and Procedures
	Dr. Herbert Righthand, Chief, Bureau of Vocational Services, Connecticut State Department of Education
11:15	Lunch
1:00	"The Preparation and Need of Vocational Teachers"
	Mr. Lester Silverstone, Superintendent of Schools, Bridgeport, Connecticut
	Dr. Byrl R. Shoemaker, Director of the Division of Vocational Education, Ohio State Department of Education
2:15	Break
2:30	Workshops: "IDENTIFICATION OF PROBLEMS"
	Group I - Teacher Educators Group II - Teacher Educators Group III - Local Educational Agencies Group IV - State and Federal Educators
4:30	Adjournment
6:00	Dinner

Tuesday, June 16

Time	ACTIVITY
7:30	Breakfast
8:30	Reports of Group Leaders
9:00	"Vocational Teacher Requirements" Dr. Martin Hamburger, Professor of Education, Head of Division of Vocational Education, New York University, New York City
9:45	Break
10:00	Workshops: Group A - Topic 1 - Teacher Requirements Group B - Topic 2 - Pre-Service Group C - Topic 3 - In-Service Group D - Topic 1 - Teacher Requirements
11:45	Lunch
1:00	"An Overview of Teacher Education Practices" Dr. Gordon McMahon, Chairman, Department of Vocational-Technical Education, New York State University College, Oswego, New York
1:45	Workshops: Same as A.M. schedule
2:15	Break
2:30	Workshop Sessions Continued
4:30	Adjournment
5:30	Dinner

Wednesday, June 17

Time	ACTIVITY
7:30	Breakfast
8:30	Reports of Group Leaders
9:00	"Preparing Teachers for Minority Groups and Disadvantaged Students" Mr. Robert L. Lewis, Jr., Assistant Director, Hartford Training Teachers of Teachers, Hartford, Connecticut
10:15	Break
10:30	"The Educational Professional Development Act and Teacher Education" Dr. J. Ned Bryan, Assistant Director, Division of School Programs, Bureau of Education Personnel Development, U. S. Office of Education, Washington, D.C.
11:45	Lunch
1:00	"Preparing Teachers for Post-Secondary Programs" Dr. Durwin Hanson, Head of Department of Vocational-Technical Education, North Carolina State University, Raleigh, North Carolina
1:45	Break
2:00	Workshops: Group A - Topic 2 - Pre-Service Group B - Topic 3 - In-Service Group C - Topic 1 - Teacher Requirements Group D - Topic 3 - In-Service
4:30	Adjournment
6:00	Dinner

Thursday, June 18

Time	ACTIVITY
7:30	Breakfast
8:30	Reports of Group Leaders
9:00	"Role of Teacher Educator in Curriculum Development" Mr. Benjamin Shapiro, Director, Vocational Curriculum Laboratory, Rutgers University, New Brunswick, New Jersey "Role of Teacher Educator in Research" Dr. Robert L. Prater, Associate Dean, School of Industries, Texas Southern University, Houston, Texas
11:00	Field Trip Visit to a Concentrated Employment Program Used by TTT for Professional Development
11:45	Lunch
1:00	"The Department of Vocational-Technical Education in a Teachers College" Dr. Robert B. Hayes, Dean of Teachers College, Marshall University, Huntington, West Virginia
1:45	Workshops: Group A - Topic 3 - In-Service Group B - Topic 1 - Teacher Requirements Group C - Topic 2 - Pre-Service Group D - Topic 2 - Pre-Service
2:15	Break
4:00	Adjournment
5:30	Social Hour
6:00	Banquet

Friday, June 19

Time	ACTIVITY
7:30	Breakfast
8:30	Reports of Group Leaders
9:30	"What They Are Saying About Teacher Education" Dr. William Reynolds, Director of Vocational Technical Education, New York State University College Buffalo, New York
10:15	Break
10:30	Final discussion, evaluation, and closing remarks
11:45	Lunch
1:00	Adjournment

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THE CLIMATE OF THE PROBLEM

By

Lester S. Silverstone
Superintendent of Schools
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Let me begin by showing how far we must go. I quote from an article by Jenkin Lloyd Jones, President, Chamber of Commerce of the United States, printed in a local Chamber of Commerce publication in May, 1970.

"Public Education must be restricted", says Mr. Jones. "We are going to have to junk the sentimental, but utterly unrealistic idea, that everybody is potential college material and we are going to have to lead into positions of self-reliance and self-respect those not so endowed."

Mr. Jones continues, "We do need a host of skilled workmen who come from the ranks of those young people who are currently providing some of our most distressful social problems."

Mr. Jones goes on to say other things about youngsters sitting in academically oriented classrooms with increasing incomprehension. He says that at the eighth grade they are three years behind. Of course, he doesn't say behind what. Mr. Jones says of high school Juniors, "There is hardly anything on the blackboard they understand."

I am afraid that Mr. Jones reflects the opinion of many members of the Chamber of Commerce, many leaders of industry and many totally incorrect "viewers with alarm" of public education. These men believe that it is possible to have a youngster at the age of 13 or 14 select a vocational area, be trained in a public school for that area, to be turned out as a competent workman in that area and that when the public schools learn how to do this, the millennium will have arrived. There will be no more problems. This is turning the clock back 60 years. All the reasons why this system didn't work have been forgotten.

Mr. Jones mentions nothing about job obsolescence; nothing about the unwillingness of Industry to support expensive educational programs -- for Vocational Education is much more expensive than the so-called "Academic" education; nothing about the cruelty and loss of abilities to a community that forces vocational decisions on youngsters who don't even know what a vocational choice means.

Children of 12, 13 and 14 years of age are apparently going to be told that there are approximately 45,000 different jobs. Choose one and let's go! We'll show you how to do it.

Years of working with children make it apparent that career decisions at this time are no more valid than the decision to become a cowboy, or a private eye, because of television exposure.

RELEVANCY--OR WHAT GOOD IS THAT GOING TO DO ME?

Perhaps at this point, we should mention the word "relevancy", and then never again. In a world of work where many of the career opportunities of the present elementary school population have not yet been established -- what does "relevancy" mean?

In the 1930's and 40's, we were told, "If you don't want to teach, don't major in physics or math. There are no professional jobs." How wrong that was.

Conversely, school systems have set up elaborate vocational programs in welding, for example, only to have these jobs made obsolete by new processes.

Just what is being done in our high schools? What are the mistakes; what are the sacred cows that must be sacrificed and what are the totally mistaken ideas about what is useful and what is not?

There seems to be a wide-spread misconception in this country that if a boy is taught Algebra and Geometry and Trigonometry for college, that this is useless for Industry. There seems to be a prevailing notion that if a youngster takes English in his plan to go to college, that this English is not usable if he decides to be a machinist. There even seems to be a mistaken idea that if a youngster learns Spanish to satisfy the language requirement for college, that this Spanish couldn't be used if he is the clerk in a store in a Spanish neighborhood.

BEWARE!

This Conference has as its title, "The Preparation of Professional Personnel for Vocational Education". I would hope that a teacher of a vocational area will be teaching in a comprehensive high school. I am deliberately making this statement in this way to lead into my next statement -- that no child should be forced into a vocational or career decision at the age of 14. Some children think they have made such a decision by the time they are 10. I am afraid some people never make the decision. But that's not the point.

We must be thoroughly aware of the fact that a classless society which, hopefully, is what we are, allows any youngster to pursue any vocational ambition.

What I am afraid we have done in the past, incorrectly, is to oversell the idea that success lies in changing a "blue" collar for a "white" collar, and exchanging a "tool" for a "pencil". What has happened is that social status has become more important than the job. Let me give you an example.

Girls who volunteer for a program to become waitresses and attendants in restaurants are entirely different than girls who volunteer for a program to be airline stewardesses, and, basically, how much difference is there in what they are doing? As a matter of fact, the waitresses may actually earn more -- but the airline stewardesses have pretty uniforms and glamor, and so we have an entirely different kind of girl and an entirely different social status.

There are many examples -- the college graduate who shuns an opportunity to be an electrician or plumber at $15 to $20,000 a year, to be an office worker at far less. The entire problem of jobs and social status must become a matter of great concern to industry and school people. I hereby volunteer for the task force.

THE VOCATIONAL TEACHER

I would never hire, if I had a choice, a teacher in a vocational area unless that teacher really liked to do the work that he was talking about - enthusiasm, I suppose it is called -- and while I do not believe enthusiasm can be taught in college, certainly the colleges can determine whether a student has this.

Recently I heard of a college professor of Astronomy who said that there were many highly competent mathematicians in his program, but very few probably astronomers, because, he said, there were few there who loved the stars.

I want to go back for a moment to make a point about preparation of the vocational teacher. I do not believe that these teachers necessarily need to have Bachelor degrees from colleges. Somehow, we must find a way of doing the "in-service" training necessary for what we consider to be the background knowledge necessary for a teacher to have to be able to properly and professionally work with children.

The fact that someone is a good electrician is not necessarily a criterion that he will be a good teacher of electrical work; but the same thing applies to Chemistry. I suppose even the course in Educational Psychology does not make either one of them necessarily a good teacher.

What we are doing, however, is to try to insure that at least there will be understanding that teaching involves reaching minds -- not just making electric connections properly, or mixing chemicals.

The question as to whether it is necessary to have a course in the history of Education to be able to teach machine shop practice, is one that I would be afraid to answer honestly in this gathering. But, I must state categorically, that I feel that any professional teacher of any subject should know something about the background and history of his profession -- and to go one step further, understanding and discussing the Philosophy of Education will make for better understanding of how to work with young people.

I am afraid I cannot guarantee that the person who has all of this will turn out better machinists than the one who does not. But if I were to pick a group of 200 teachers of Machine Shop, divide them randomly into two groups of 100, gave one group History and Philosophy and Educational Psychology and the other group nothing, I am sure that the first group, as a group, would be more successful in teaching.

HISTORY REPEATS ITSELF

Many years ago, we used to have Trade Schools, but at the same time, we used to have young men going directly into a lawyer's office from high school, and we used to have young men going directly into a pharmacy from high school, and by study and examination, these people became lawyers and pharmacists, and from the Trade Schools came some of our most successful technicians and, subsequently, business men.

But we dropped that because it was felt that broad, general education for the attorney and the pharmacist and for the technician was necessary for many reasons.

It is possible, however, that we have added to what we consider to be essential background knowledge, merely to round out the number of years we think young people should be in school. It may be that we need to reassess these decisions.

This brings me to the question of recruitment of vocational teachers. Notice that I have kind of "fudged" on the preparation, but will get back to it.

Is it possible to teach plumbing, electrical work, carpentry, printing, without having been a practitioner in this field? The answer is, properly, "No."

What has happened in our Industrial Arts course is something a little different from the teaching of a vocation. The problem is more complex even than that, since it is estimated that in a man's lifetime his job might become obsolete about three times. Can we possibly turn out people who will be fit only for the scrap heap known as "public welfare" if they cannot learn a new job at the age of 45?

We, all of us, realize that the basis for any kind of training and retraining, is what we call "solid basic education", including comprehensive skills, academic and manipulative skills, and, I would have to add, a general education -- and I also include the Arts, Music -- that will make it possible for him to learn how to learn by himself.

So I would add to our requirement that the vocational teacher be enthusiastic about his vocation. I would think that it is necessary that his education, wherever it took place, must make him enthusiastic about learning.

Let me say parenthetically here that I know of no high achievement, in any area -- intellectual, technical, or even athletic, that was accomplished unless the person concerned studied, practiced or worked by himself because he desired to.

While sparks can be ignited in a classroom, the fire can only be kept going by the individual. A great teacher stimulates and motivates -- he doesn't do the studying.

THE GOAL OF EDUCATION

Our job in public education in all areas, vocational as much as academic, is to prepare young people to learn how to educate themselves. Vocational courses must be so structured that the graduate of such a course can continue to learn his trade because he knows the theory of the technology, as well as the practice. The teachers who teach these youngsters must be able not only to get this kind of training across, they must be able to motivate or arouse the enthusiasm to insure, that such will be the result.

I realize I am asking for the moon, but that does not seem impossible any more.

A HINT OF THE FUTURE

We have reached that time in American Public Education which will be designated the "vocational skills explosion time". The latest Congressional Acts, I believe, are the symptoms both of the need for technicians (trained) and the recognition of that need, and indeed, the recognition that the job must be done in the public schools.

The obvious way -- I say obvious when I mean that, as I see it -- will be to prepare youngsters for a vocational area -- with options, not only to choose the specific vocation -- bricklaying, for example -- in the general area of Building Trades, but also with an option to go on to Post High School education, if desired.

Before I go any futher, it is important to point out that there is the possibility that the professional teacher organizations will oppose the certification of teachers without a B.A. degree. We must break out of these restrictive bonds that were designed to keep people out of professions when applicants far exceeded demand. Of course, there were academic reasons, also -- but it cannot be an automatic situation, or else we shall never accomplish these programs.

We must face these serious and vital issues:

(1) High School dropouts will continue to increase, unless we find an alternate to an essentially academic high school.

(2) High School organization will have to become more flexible. It is possible that the entire senior year should be run on an academic morning and an optional afternoon -- work or school.

(3) We must have another source of teachers to satisfy the demand for meaningful education (job field training).

(4) We must learn how to recruit and train these teachers.

(5) We must learn how to design "curricula" to do the job in vocational training we need to do.

(6) We need to get the money.

(7) Last, and not least, we need to get the leadership to get the job done.

THE STATE DIRECTOR LOOKS AT THE PREPARATION OF VOCATIONAL TEACHERS

By

Byrl R. Shoemaker
Director of Vocational Education
State of Ohio

It would be a trite statement to say that a Director of Vocational Education looks upon the expanding needs of teacher education as a challenge. It is trite because the area of teacher education probably has always been a challenge in the area of vocational education and because the teacher education problem today represents just one of the many issues facing those responsible for working with the immediate and long range developments in vocational education.

The viewpoint of a state director concerning the preparation of vocational teachers depends upon his concepts of vocational education and the plans that are evolving within his state for the expansion of vocational education programs. This topic, therefore, can hardly be entitled "The State Director", but might more accurately be described as "A State Director" and a view of the preparation of vocational teachers. In looking at teacher education, there was a time when all agriculture teachers could be prepared in the agriculture education college and come out fully qualified to enter the agriculture programs within the state and to exert a positive influence upon the total agricultural program in the public schools -- there was a time when all business education teachers graduated from the business education program at the university with a shorthand-based program, prepared to be employed in any business education program in the state or nation. They were secure in their knowledge that their shorthand and typing-based curriculum was adequate for preparing youth for the world of business--there was a time when all teachers in vocational home economic programs following the vocational home economics curriculum at the collegiate level graduated, secure in their knowledge that they could teach in any vocational homemaking program within the state and establish a well balanced program in the area of foods, nutrition, child care, etc. -- there was a time when all trade and industrial education teachers could be selected from the occupational world and prepared through in-service programs or the pickup method to teach in the vocational programs of our state and nation.

The program of vocational education has changed radically in the past few years and will continue to change. If we look at the modern concept of vocational education, we find a significant difference in the scope of vocational education today as compared with yesterday. The following program in vocational education at one of our area vocational centers will illustrate these differences:

PENTA-COUNTY VOCATIONAL SCHOOL AND TECHNICAL COLLEGE
GENERAL INFORMATION

Instruction in all six areas of vocational education will be available to high school students. These are as follows:

I. A. Agriculture

1. Training for Non-Production Agricultural Occupations
2. Vocational Horticulture
3. Advanced Farm Business Management and Accounting
4. Advanced Agricultural Equipment and Mechanics

B. Business Education

1. High Skill Steno/Entry Secretarial 11-12
2. Account Clerk 11-12
3. Entry Business Data Processor 11-12
4. Office Machines Operator 11-12
5. Cooperative Office Education (12th only)
6. Office Reproduction Specialist 11-12
7. Intensive Horizontal Business Office Education (12th only)

C. Distributive Education

1. Retail Selling, Buying and Pricing of Merchandise and Personnel Management

D. Home Economics

1. Child Care Assistant
2. Child Care Worker
3. Homemaker's Assistant
4. Dietary Aid

E. Trade and Industrial Education

1. Machine Trades
2. Auto Mechanics
3. Auto Body Repair
4. Cosmetology
5. Drafting
6. Electrical Construction
7. Commercial Art
8. Carpentry
9. Dental Assistant

10. Medical Laboratory Assistant
11. Industrial Electronics
12. Welding and Sheet Metal
13. Commercial Foods
14. Printing

F. Occupational Work Experience Program

II. Within these areas we will be concerned with preparing young people for initial employment. In the areas where apprenticeship or other advanced training programs exist, young people will be prepared for entry into those programs.

III. The preparations of youth for initial employment will be concerned with three specific areas of instruction.

A. Related Technical Information

B. Skills

C. Occupational Information

IV. Related technical information will deal with such subjects as mathematics, blueprint reading, materials, equipment and machinery of the specific occupation and the standard operating procedures involved.

V. The teaching of skills involves such manipulative action as is found in typing, machine shop, carpentry, etc.

VI. Occupational information basically involves a student's attitude toward himself, his fellow worker, his employer and his job. The kind of action on the part of the student that will give him the best possible opportunity to get a job, to hold the job and then to advance in the job will be stressed. This is one of the most important parts of vocational training.

VII. The subjects to be offered in the school have been determined by a survey among students and with industry. Where students indicated a desire to learn a given subject and industry indicated a need for trained personnel, the subject has become part of the school's offering.

VIII. Adult Education

A. Apprenticeship

1. Any area that calls for journeyman status

B. Trade Extension

1. Any area in which adults need additional training so that they can keep up with the technological changes involved in their job or to attain technical information or skill that will help them advance.

C. Manpower Development and Training Act

  1. Facilities will be available for this program

D. Vocational

IX. Technical College

1. Data Processing Technology
2. Chemical Engineering Technology
3. Electrical Engineering Technology
4. Mechanical Engineering Technology
5. Civil Engineering Technology
6. Tool and Manufacturing Technology
7. Welding Engineering Technology
8. Accounting
9. Food Service Management
10. Wholesale Management
11. Others

The agriculture program at the vocational education center is no longer one program, but four different programs, calling for depth of technical knowledge and skill in each of these areas. The successful horticulture teacher in this program was a successful greenhouse operator with some horticulture college background but no agriculture education background. The agriculture mechanics teacher who has a shop 55' x 60' and loaded most of the time with the most recent equipment in the area of agriculture, gained experience in an agricultural equipment dealership rather than through the agricultural education college program. Depth of skill, depth of technical knowledge, qualification through work experience now has become important in the field of agriculture.

If we look at the vocational programs in the area of business, we find that a number of the programs are not shorthand-based, but require skills and technical knowledge in occupational areas unknown in our public schools ten years ago. A recent call was from a major city vocational directory frantically looking for a person to teach his unit record operation program which bordered on the level of computer programming. Very few of the business education graduates from our colleges have the depth of experience that will enable them to prepare youth to enter and succeed in the area of data processing, now identified as unit record operation. How many business teachers of the old school have sufficient background in the area of office duplication to take over a sophisticated office duplication unit and prepare the people in the area of photography, offset press and other supplemental equipment items relating to office operation?

How many home economics teachers trained in our tried and true vocational home economics college programs have sufficient depth of experience and knowledge to teach commercial foods, child care and development for the preparation of child care aids and housekeeping duties to the point of sucessful employment in hospitals, nursing homes, etc.

DE, Distributive Education programs, which have not yet moved into specialized areas with a large number of differentiated programs, still are essentially sales based. Where would you get teachers, however, if your distributive education unit was assigned a responsibility for the establishment of an occupational work adjustment program for 14 and 15 year olds? As a matter of fact, what are such programs?

In the area of trade and industrial education we find many of the occupational areas represented still require people with high skills and technical knowledges to be selected from the areas of business and industry and to be prepared for teaching through the in-service method of teacher education. Are present in-service education programs, however, adequate for the expanding opportunities in trade and industrial education?

If we would look at the new programs for the disadvantaged, a number of which fit into each of the broad occupational categories, and some of which overlap all of the occupational categories, where do we find teachers for such programs? Programs that I refer to might be identified as follows:

OHIO VOCATIONAL PROGRAMS
FOR MAKING STUDENTS EMPLOYABLE

Occupational Work Experience

The Occupational Work Experience Program is designed for youth 16 years of age and older who are unable to succeed in regular vocational education programs. They may have socio-economic, academic, or cultural handicaps which prevent them from succeeding in school. This program is operated on the basis of one-half day in school and one-half day on the job with a teacher-coordinator having a minimum of 12 and a maximum of 25 students. This program was first started in 1962. We now have 267 units. Approximately 85% of all the students enrolled in this program graduate from high school and are presently working full time.

Occupations Laboratories

The Occupations Laboratory is designed to provide disadvantaged youth with an opportunity to become work-adjusted through participation in a light industry operation conducted within the school. The laboratory produces products used by the school on an assembly line basis, and the coordinator places the students in Occupational Work Experience as soon as they have developed the necessary attitudes and employability skills. These laboratories are operating in our large cities and in some area vocational centers.

Occupational Work Adjustment

This is a school supervised, work experience and career exploration program for dropout prone 14-15 year olds. It is designed so that students gain their regular academic requirements and are enrolled in at least two periods of work adjustment and employability skill instruction conducted by a teacher-coordinator during school hours. The teacher-coordinator works with the students, parents, and employer so that these youth have a totally integrated school work experience program, enabling them to develop to their highest potential and move to higher levels of vocational and academic instruction. This program operates under the provisions of the recent temporary amendment to child labor regulation #3. This is the first year of operation and there are 39 units. There will be at least an additional 70 units next year.

Career Orientation

This is an exemplary program designed to provide all seventh and eighth grade students with a realistic exposure to the jobs, careers, and professions in the world of work. It is a regularly scheduled curriculum included at the seventh and eighth grade level, and all students gain a minimum of 540 hours of career orientation curriculum exposure over a two-year period. The emphasis is upon field trips, student activity, and use of resource persons so that students gain an understanding of all jobs and careers broken into large groups according to the Standard Industrial Classification. Career orientation curriculum units are taught by the teachers in the regular subject areas, namely: science, English, math, social studies, etc. The program utilizes parent, business, industrial and professional persons in an advisory capacity. Six major school districts have this program in operation involving 6,500 students.

Cooperative Vocational Programs

Include Distributive Education, Diversified Cooperative Training, Cooperative Office Education, Agri-Business Coop., and Home Economics Job Training Coop. These programs are high skill in nature and include skill and technical related instruction within the school coupled with job training plans and on-the-job supervision and coordination. In addition to these programs, many high skill programs include cooperative placement of students during their last semester prior to graduation and entrance to the world of work. Presently there are approximately 18,000 students enrolled in cooperative vocational programs. This includes those enrolled in the OWE and OWA Programs.

New Programs and Services to Provide Vocational Education for the Disadvantaged

All schools are provided with information and application forms so that they can apply for approval of new and innovative programs and services designed to prepare disadvantaged persons for jobs and careers.

New Programs and Services to Provide Vocational Education for the Handicapped

All schools are provided with information and application forms so that they can apply for approval of new and innovative programs and services designed to prepare disadvantaged persons for jobs and careers.

Centers for Vocational Rehabilitation and Job Preparation

Centers are being established in each of Ohio's eight major cities. These centers are designed to serve school alienated youth who may be disadvantaged and handicapped and need a special environment in order to become rehabilitated and prepared for jobs.

World of Work

Programs designed for all childern in Grades K-6 to provide them with a basic understanding of various occupations with which they come in contact.

Career Exploration

New and innovative programs designed to provide all students in grades 9-10 with information and actual on-the-job experiences in clusters of occupations.

What collegiate program is preparing people for programs planned specifically to serve disadvantaged youth? These are growing significantly in our state. Next year programs planned specifically for disadvantaged youth will serve over 17,000 youth within our state. This represents, however, less than the half of the number of programs that we should have functioning within the state of Ohio.

If you look at our programming for pre-vocational education which has become a function of the vocational education program as a result of the Vocational Education Amendments of 1968, where will we get teachers for a system of vocational guidance and vocational education which will initiate the programs listed below? We have accepted the following as a goal for the state of Ohio:

First Six Grades (All students)	1. Respect for the World of Work 2. Motivation to want to do some part of the World of Work
Grades 7 & 8 (All students)	- Career orientation to our technical society

Grades 9 & 10 (All students in one of two programs)	1. Exploration for occupational choice 2. Work adjustment program for school disoriented youth
Grades 11 & 12 (or 16 years of age and up)	- Broad goal-centered educational program, including a broad vocational education program

The outlook in terms of a state director relating to the preparation of vocational teachers also depends upon plans for the future. What size of vocational education programs do you envision for your state? Within Ohio we have a new state law, identified as Amended Sub. H. B. 531, which requires all school districts within the state to establish an adequate program of vocational education by 1974. This law requires all school districts to submit a plan by April 1 of this year and required the State Board of Education to establish a plan for the state which leaves no district out of the plan. The law requires schools with fewer than 1500 students in the upper four grades to cooperate together for purposes of planning an adequate program. Our State Board of Education established minimum requirements as to an adequate program of vocational education, and has stated that a minimum program would require no fewer than 12 different vocational offerings and 20 different classes, and that in any cooperation between school districts, one district must offer at least 10 programs with 20 different vocational education offerings. The regulations further indicated that in the allocation of construction funds, districts or combination of districts with 3,000 or more in the upper four grades would receive a priority. The law enabled the districts to plan alone if they had 1,500 or more in the upper four grades; if not, they would need to combine, either through a joint vocational school district, or in a meaningful contractual relationship.

Such action on the part of the state legislature will result in a plan which, instead of providing for 638 administrative units for vocational education, will provide for no more than 105 vocational planning units within the state. Our projected plans would suggest that we should have no more than 56, but the law does not permit us to reach this goal. Needless to say, this broad planning will have great implications upon our conern for both quality and quantity of vocational teachers as we move to implement such plans.

The fact that our legislature backed their legislative acts with money was indicated in that they provided $75,000,000 of state funds to be used to match local funds for the construction of area vocational education facilities. The legislature also provided more units for growth in this next year under our state foundation program than we had in our total vocational education program in 1963. This confidence and encouragement on the part of the state legislature and our State Board of Education has led us to establish goals which will have a direct implication upon our need for teachers, both at the high school and the adult level.

As a part of our planning we have moved our goals from the concepts of generalization into very definitely quantified objectives. The objectives established in our state plan to be achieved by 1975 established for our state are as follows:

1. To provide a work orientation program for 900,609 or 75% of the 1,200,812 students, at the K-6 grade level which will encourage constructive work attitudes in all youth.

2. To provide a career orientation program for 270,484 or 75% of the 360,645 students, at the 7th and 8th grade level of 12 and 13 years of age to build a basis for a career exploration program realistic in light of all the circumstances surrounding them and the actual and potential labor market demands for gainful employment.

3. To provide a career exploration program for 299,170, or 75% of the 398,894 students, at the 9th and 10th grade level or 14 and 15 years of age.

4. To provide a dropout prone youth occupational work adjustment program for 79,778, or 100% of the 79,778 dropout prone students, which comprises 20% of all youth at the 9th and 10th grade level or below 16 years.

5. To provide a preparatory job training vocational education program for 166,958 or 40% of the 417,395 students at the 11th and 12th grade level or 16 years of age and above, including:

   46,957, or 75% of the 62,609 disadvantaged school youth who comprise 15% of all youth at the 11th and 12th grade level or 16 years of age and above who have academic socio-economic, or other handicaps that prevent them from succeeding in a regular vocational education program, and

   20,869, or 50% of the 41,739 handicapped school youth who comprise 10% of all youth at the 11th and 12th grade level or 16 years of age and above, who, because of their handicap, cannot succeed in a regular vocational education program.

6. To provide a post-secondary program for 27,411 or 3.2% of the 856,656 persons 18 to 22 years of age.

7. To provide retraining and upgrading vocational education programs for 414,222, or 10% of the 4,142,229 adult workers.

8. To provide four residential vocational schools for 2,000 youth 16 to 21 years of age who can profit from this type of an instructional program.

9. To provide a vocational home economics consumer and homemaking education program for 90,103, or 25% of 360,412 girls at the 9th thru 12th grade level and 20,510, or 24% of the 85,457 adult women in a one-year age span which will prepare them for the role of homemaker in their dual role of homemaker and wage earner.

10. To provide a vocational home economics consumer and homemaking education and family life program for 7,893 or 50% of the 15,786 dropout prone girls at the 7th and 8th grade level which comprises 13.2% of the girls at the 7th and 8th grade level and 95,498, or approximately 50% of the 190,995 adult women in a three-year age span living in the culturally and socially depressed areas.

11. To provide a vocational cooperative education program for 79,778, or 100% of the 79,778 who are dropout prone or who could benefit from financial assistance and who comprise 20% of all youth basically in the 9th and 10th grade level.

12. To provide a vocational work study program for 50,087, or 30% of the 166,598 vocational students basically in the 11th and 12th grade vocational program, who are 15 through 21 years of age, and who are in need of earnings from employment to pursue a vocational education program.

If we would look, therefore, to changes in our teacher education programs, I would suggest that agriculture teachers will need to be prepared to depth in such new occupational programs as horticulture, agriculture engineering, agri-business in other agriculture departments and then receive methods of teaching within the college or department of agriculture education. This brings us headlong into a conflict between colleges competing for enrollments. The adjustment to these new needs for teacher education is proving to be no small problem. In addition to collegiate preparation of agriculture education teachers, teacher certification procedures must provide for the employment of teachers directly from the employment market related directly to the new vocational education opportunities in agriculture. Teacher education in our colleges and universities must make provisions for a broad and intensive in-service program for such teachers similar to those provided for many years in trade and industrial education.

In the area of business and office education, there must be provisions for entrance into the business and office education programs in the last two years of four-year collegiate programs from two-year associate degree technical education programs. Such a practice would provide for a variety of different skills and technical knowledges for the people planning to enter the business field. Our business and office education program can no longer be shorthand-based. We must provide for the development of skills in such areas as unit record operation, office duplication, accounting, etc. In addition, this service must also provide for entrance of persons into employment in the teaching of business programs from the world of work in business who have the technical knowledge and skills in occupational areas now included in the new business programs.

In the area of home economics, the addition of responsibility for job training programs has brought about the problem of providing people with job experience and with training in depth of skills and knowledge in occupations related to homemaking. Child care and development, commercial food, commercial sewing, housekeeping--all these areas represent occupations in which greater skills and work experience are required as they teach for job preparation as compared to the utilization of these skills in the home as a homemaker. In addition, the area of homemaking is expanding to include special programs within the inner city sections of our major cities, requiring new competencies on the part of the teachers in adjusting to the disadvantaged youth enrolled. Future expansion of our homemaking program to prepare girls and women for the useful work in the home is tied closely with new types of programming in the inner city section.

Looking at the new job training responsibilities in homemaking, there must be a means of preparing teachers in specialties at the collegiate level and of accepting teachers into the instructional program based upon their occupational experiences which give them depth of skill and technical knowledge gained through their work.

In trade and industrial education, a major factor is the broadening into new occupational areas, representing new levels of ability and interest. The call of the President to expand the occupations in the areas of construction fields will provide trade and industrial education with a particular challenge as it attempts to match the salaries in industry for people with skills and competencies in the building crafts. Trade and industrial education has for many years faced the problem of providing an in-service teacher education program for teachers direct from industry. It is my observation that such programs cannot be campus-based, but must be based upon concentrated pre-service instruction and continuing in-service programs of visitation to the teachers as they are teaching in the field.

An allocation under the EPDA program has enabled Ohio to establish a four-week intensive full-time pre-service program for persons brought in from occupations prior to the opening of school in the first year in which they are employed, followed by visitations by a teacher-educator to such teachers at the campus serving as a center for the teacher education program. At the end of the first year there will be a two-week seminar, again at the university, to assist these new teachers with one year of experience to reorganize their educational programs in preparation for the second year of teaching. The in-service teacher education program will again follow these teachers during their second year on an every-other week visitation basis, plus the seminar activities for the total class group. By the end of the second year the teachers will have completed a course of study and gained competencies in the ability to organize classes, instruct students and manage equipment and materials. This program is now in its second year and shows great promise for the adequate conversion of highly qualified skilled workers into competent teachers. Perhaps this concept and program will have applications in the other occupational areas.

As we leave our regular service-oriented occupational programs, however, what about the program planned for disadvantaged youth which are based not upon providing these youth with a depth of skill, but with providing them with an honest job and helping them to learn to be successful in that job and adjust to the workaday world? What university programs are preparing people for this type of program? These people need a depth of understanding of youth, a broad understanding of the learning process, capabilities in the area of school and community relationships and an orientation almost as a social worker and alter-parent. There are no programs in our universities as yet planned and organized for these people, no programs organized as a part of the regular university program to provide the skills and knowledges needed. The number required is not yet large enough to encourage universities to establish the types of educational programs to prepare this type of person. This type of person must possess: background in the world of work which will enable him to understand the nature of business and industry into which the young people will go; skills in teaching and ability to work with youth groups; a deep dedication to the needs of disadvantaged youth; an ability to open doors for the students within the industries and businesses in the community. Teachers for this type of program will come largely from persons selected from a vocational, practical arts, or social science background who have had work experience and who can be prepared for the new type work through pre-service workshops and in-service teacher education.

Where will we get the teachers to assist the students in the area of remedial education who can adjust to the more mature student and meet him at his level of interest? Is this a function more of a person to guide the learning and who can utilize the many fine individual learning processes which have grown up within the last few years? Our experiences at some of our area vocational education centers would suggest that youth enrolled in vocational education programs will readily accept help in the area of remedial education if approached on a no-threat basis and provided with the tools of our modern technology to assist in the teaching process.

What about teachers for a system of vocational education and vocational guidance? The key factor here is that there is no intent to buy a new school system, but to change and convert the one which exists. If we buy this concept, then we start with the teachers that are there, and encourage in-service teacher education programs. Through leadership and through providing funds for supplemental services and instructional materials development we assist them to develop the type of program which will enable youth to become motivated towards work, to become oriented towards the world of work and to explore the world of work.

Throughout this system of vocational guidance and vocational education and throughout many of the vocational programs, instructional materials will be extremely important. The first source of these instructional materials should be the commercial publishers, but it is not likely that many of the materials needed will initially be worth the investment of the commercial publishers as programs move faster than the field of publications. Teacher education centers have a responsibility to cooperate with state offices in the establishment of instructional materials laboratories to serve the needs for instructional materials not served by commercial publishers.

The plan for teacher education for all vocational areas must include provision for entry into teaching from depth of experience in the world of work. A research study conducted in trade and industrial education in Ohio used test results as a basis for study of program success. One of the background that correlated with student success was the number of years the teacher had spent working in the occupation before becoming a teacher. There was no significant correlation with such factors as age or college credits.

It is my judgement that teacher education in this fast-changing field of vocational education so far as undergraduate preparation is concerned, will follow the developments in the field, rather than lead these developments. Expansion of undergraduate programs as described earlier will, of course, be essential. The key relationship between our teacher education programs in our vocational education programs, will be a broad in-service education program to convert existing teachers to new jobs or to convert existing workers into persons who can teach in our schools. A short pre-service experience under the direction of persons knowledgeable about and experienced in the new programs, followed by an intensive and rather expensive in-service teacher education program, must be one of the main bulwarks of our teacher education program for the future.

VOCATIONAL TEACHER REQUIREMENTS IN URBAN SETTINGS

By

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The rather innocuous title of this paper hides much more than it reveals and promises much more than I can deliver. For one thing even the published standards as issued by various state departments hide more than they reveal. For another the matter is not primarily technical, that is, dependent on professional analyses resulting in the adoption of expert advice as to what an acceptable "vocational teacher" should be like. Still another consideration is that this particular field is the most heterogeneous, the most dependent on the supply and demand in other fields, and the greatest patchwork in all the specialties of teaching.

To continue, rather than expound on requirements which already exist in print in vast and deadly detail, it may be more helpful to dig even deeper into the issues of certification themselves, especially in our subject field. Here the credentials barrier - artificial requirements which deter the recruitment of desirable staff - is one of several challenges to traditional formulations of the certification problem. No field demands such re-examination as much as urban occupational education, and I hope that we are willing to suspend most assumptions about requirements until the special problems of new target groups in our inner cities are fully evaluated as the chief determinant of future certification.

We need to be reminded that for the people in the ghetto, "standards" and "certification" have as frequently been seen as exclusionary as protective of public interest. We also need to remember how often we have resorted to "equivalency" and "substitution" when it suits us. This is most apparent in vocational education, where under the same huge umbrella, we have insisted on degrees in business education, clearly expected experience as an equivalent in trade and industrial, done one thing in food and cosmetology, another in electronics, still another in home economics, etc. Merely listing our constituencies, and then adding "related" surely demonstrates that we are hardly able to talk about requirements in a global sense.

I assume that our common purpose is to improve the supply of occupational teachers in the urban schools. Perhaps it is now possible after several years of breastbeating and headknocking to consider what an ideal urban occupational teacher should be, for the moment using the term globally. To meet the minimum demands being made, he should have a good general education, business or industrial experience, preferably an apprenticeship or equivalent, a guidance certificate, should come from a disadvantaged background, should be especially competent in reading instruction, and should have "positive attitudes" and so on. Are the courses, the degrees, the person, the experience, the most important? Which can be substituted? Old questions, but nowhere more difficult to answer than in occupational education. And even more so in the urban school. The paragon I have described does not exist as a person but such roles and functions must be performed and system changes to facilitate their development must be accelerated. Yet the basic dynamic of certification acts to prevent change. My point is perhaps best proven by the fact that the single most apt generalization about teacher certification is that every member of the educational community insists it is someone else that prevents change. Thus, schools of education and teachers colleges blame state departments -- the latter are frequently far more permissive than the colleges; the boards of education blame the others; the unions play their role -- and altogether the compromise contributes to keeping down the supply and discouraging new entrants.

At the risk of being repetitious, I am suggesting that before we can achieve our objective of getting more and better occupational educators, we must first abandon the myth that there is something impartial, objective and detached about certification and recognize rather that it is more likely illogical, a standoff to different pressure groups, (primarily within the several vested interest groups in education) and hardly designed to be an educational innovation agency. Further, even if it has served a useful role for occupational education as a whole, the very fact that we are concerned here with urban disadvantaged means that the demands placed on occupational educators in the future will be vastly greater than ever before. Thus the majority of previous occupationally-oriented students were, to a greater extent than is often credited, able to profit from their courses because of varying degrees of pre-selection. The evidence is very clear that students with the characteristics enabling them to enter occupational education (especially the more demanding programs) will now seek college courses; and the less equipped will more often than ever before be the target population of urban occupational education. Consider one further challenge: the image of vocational education is especially tarnished among various minority groups who have often been excluded from the better courses, the union, the jobs, etc. So the technically proficient teacher who catered to students now no longer likely to come into the program is no more a premium person.

Since I am more concerned with reformulating the issue than with a systematic exposition of the entire problem, I hope that by suggesting some possible approaches to rapid change in this field you will understand that I put them forth to improve the discussion rather than to present a program. First, it behooves us to look at successful occupational training wherever we find it, especially where the teachers are not certified - the military, industry, manpower training programs, OIC and other self-help or community-based programs. Recognize the difference - accept the failures - acknowledge that the school seeks more than a marketable skill -- but what do these agencies offer us as models?

Second, exorcise the demon of pre-requisites and its twin, sequence. Especially in occupational education, just what is pre-service, in-service, concurrent? (What I say here goes for secondary students as well, I should like to add). Whether it is the number of hours, of years, of credits - if they are barriers to training good people with qualifications - they must be sharply modified. The corollary is the increase in and improvement of proficiency examinations so that more effective ways of determining competency than number of years, for example, may be available. Fourth, redefining the job - determining the potential for differential staffing, should go far to eliminate still another myth in teaching - that of equality and equivalency - which stands in the way of our objective. The strenuous effort to equate non-equatable things is especially absurd in occupational education - there need to be various kinds of educational personnel - not one global title: teacher.

I could continue to list other suggestions but it should be apparent by now that my overall recommendation deals more with changing the program of occupational education and then determining certification than with another set of a priori standards. It is not so much what people come with that counts but what they are encouraged and enabled to do that will be the major impetus to recruiting and further training of new and better teachers. One example: the difference between an occupational educator (generic title for all such staff members rather than vocational education teacher) and his counterpart in industry or the military is that he is expected to develop a person, not only to produce a marketable skill. Accordingly, the occupational educator must be able to do one thing that he does very little now: he must be able to meet and talk with and plan with and correlate curriculum with the general educator. Occupational education must play the role, especially in the inner city, of both preparation for work as well as incentive for learning and springboard for general education. The hierarchy within the educational system will continue and the teachers within it will continue to be a class structure unless and until we in occupational education take leadership in our own general education role without sacrificing preparation for work.

In closing, I want to reiterate my previous implication - that even frequently archaic certification standards allow a great deal of experimentation and flexibility to those who are willing. Further, this has not been an attack on certification as much as on some assumptions that accompany its development and use. Finally, in the broad field of occupational education which has the most heterogeneous manpower supply, the greatest openness in the actual teaching situation, the greatest amount of active student participation, the most advantageous opportunity in terms of incentive to learn and relevancy, and, in the inner city, the further opportunity of meeting immediate needs -- here the possibilities for change are enormous and I see intended discussion as a contribution to such change.

AN OVERVIEW OF TEACHER EDUCATION PRACTICES

By

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My topic, "An Overview of Teacher Education Practices," should have been qualified by the addition of the phrase, "in Trade and Industrial Education." I am by no means unfamiliar with the practices of teacher education in agriculture, business, and distributive but my interest and experience lie in the areas of trade and industrial education and health occupations. Whatever expertise I may have has been gained through twenty-four years of concentrated participation in this area of education.

When a speaker furnishes a biographical sketch which lays special emphasis upon his experience, he may be suspected of attempting to set himself up as a great authority, thus assuring in advance a favorable reception for his ideas. My motives are much simpler, since I only wish to establish my right to speak on this subject and to reassure you that I will not stray from discussion of the concerns which have occupied most of my waking hours and some of my nightmares for so many years.

It is always difficult to assess without previous knowledge the probable background of the participants in an institute of this kind. At the risk of being unnecessarily repetitious for some of you, let me try to outline the basic differences between teacher education in general and teacher education in trade and industrial education and attempt to clarify the reasons for the practices which we follow.

We are, first of all, concerned with adults. A new approach to educational psychology has had to be developed by our teacher educators to compensate for the differences in attitude, educational background and emotional maturity which we find among our students as contrasted with the typical undergraduate. Our people are at once more mature and more dependent. They have no fear or hesitation about demanding special considerations while at the same time they tend to lean upon us for every service from that of employment agent to father confessor.

I can vividly recall the student from Montana who sat in my office at Colorado State University pouring out her tale of woe about an unmanageable four year old while the child in question rifled my file drawers and tipped over the ash trays; or the TandI student who circulated a petition on the Oswego campus to demand that the college provide more recreational activities for the students' families.

We deal with people who, through work experience, have already mastered the subject area which they propose to teach. There are winds of change whistling about our ears and carrying a warning that we may face pressure to provide laboratory experiences or internships as a substitute for industrial experience; but to date none of our states have taken any substantial step in this direction. Such a change, if it comes, will probably appear as cautious pilot programs which will be carefully assessed in terms of end product before many of us will agree to the change.

Change today has become the watchword of the young and anyone who appears to resist change is obviously out of touch with the times. What youth fails to realize is that much of what is good in American life, particularly in education, is the result of an endless series of changes and refinements. I know of no other segment of our national life where there is more soul searching, internal criticism, and ceaseless effort to find a better method than there is in teacher education.

Trade and industrial teacher education is no different in this respect. We have had to struggle so long and so hard for even token recognition that we have perhaps over-compensated. We meet endlessly, coming from all parts of the country to exchange ideas, compare notes, and cooperate with each other on studies and experiments. There is little institutional jealousy, and promising new ideas are generously shared. We are honestly searching for new techniques, new instructional objectives, anything which would favorably affect the preparation of our teachers. But while we continue to look there are certain basic procedures in almost all T and I teacher education across the nation which we sincerely believe have been adequately tested and which we will continue to use until we find viable alternatives.

Naturally, every state or every institution within a state which is responsible for T and I teacher education has its own approach, from selection through graduation. I will confine my discussion to practices in New York State and particularly to my own operation out of the State University at Oswego. New York has three centers for T and I training -- one in New York City; one at the State University at Buffalo; and one at Oswego. The New York City office services the city and immediate surrounding area; Buffalo covers the counties adjoining Buffalo; and Oswego has the bulk of the land area -- the remaining 48 counties. Each of these offices operates independently, but since the New York City office can not yet offer a degree program, Oswego handles many of the graduates of New York's basic program who want to secure college degrees. I make this point particularly because this series of institutes has been concerned with preparing Vocational Educational personnel for work in metropolitan areas and I need to establish

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my claim to a working relationship with the problems of our metropolitan area. Through our contacts with the New York City and Long Island teachers we are made acutely aware of their problems and their needs and we have in addition our own teachers in Syracuse, Albany, Rochester, and Binghamton who share many of the big city problems.

One problem which we have shared with general education involves the accusation that teachers in deprived areas have historically been the despised white, middle class, Anglo-Saxon protestants who allegedly have neither understanding nor compassion for the inner city child. None of us would question that these stereotypes appear in all schools but I believe that the nature of our recruitment and selection procedures in T & I is a powerful force opposing such a condition. Our teachers tend to take positions and frequently to live in the areas in which they are recruited. We do not send up-state welding teachers to Bedford-Stuyvesant or transplant many Brooklynites to Syracuse. Our programs are open to any intelligent craftsman who can prove an acceptable amount of work experience and demonstrate ability to do college level work. His color, race, religion, or national origin have absolutely nothing to do with his selection. Granted that since T and I is still largely concerned with the skilled trades and since some minority group members have found it hard to get into those trades, we cannot recruit as many negroes or other minority group members as we would like. But this situation should improve as the high school graduates who are now in the building trades and other crafts break into the labor market. Some of them will be attracted after a few years to go into teaching. Meanwhile, we continue our practice of recruiting as close as possible to the areas requiring teachers; and believe me, the men and women who enter our programs are no strangers to the lives of the children they will teach.

The New York City center is located at Manhattan Community College in the heart of Manhattan; the Buffalo office is in the city of Buffalo; while I have three centers--in Syracuse, Rochester, and Albany. Each center recruits for its own area; and through a combination of courses taught in the centers, courses taught in the field, and summer and Saturday classes on the campus at Oswego we prepare teachers who usually go to work at or near their current homes. There is, of course, mobility, particularly among vocational directors, but we are concerned here primarily with the classroom teacher.

Since I have referred frequently to recruitment it may be of some interest to you to examine our recruitment procedures. There is some difference of opinion among vocational educators on the importance of certain parts of our selection process. I have worked with both informal and formal approaches and am convinced that the effort involved in careful selection is well-repaid by the elimination of many problems which would otherwise not be suspected until too late.

We conduct a continuing campaign through word-of-mouth advertising and at certain intervals by newspaper advertisement to find experienced people who might be interested in becoming teachers. We conduct meetings to explain the program, discuss job opportunities and clarify items on the "Application for Evaluation" which each individual must submit.

With his application we require letters verifying the experience which he claims, his high-school record, and transcripts of any college credit he may have. Within the next three months the applicant must arrange to take the State University Admissions Examination; the California Test of Mental Maturity, Short Form, which we administer; and the written or theory section of one of our occupational competency tests. When all of these scores have been received we arrange a personal interview.

Armed with the results of the three tests and his scholastic records we are prepared to eliminate anyone who does not show evidence of ability to do college-level work; anyone who exhibits signs of emotional instability; individuals whose physical appearance would probably interfere with their effectiveness as teachers or whose speech patterns or voice quality are unacceptable. We cannot expect teacher education to remake anyone and since some of these people may begin teaching at the same time they enter our program, they must be acceptable in most of these areas.

On occasion I have assisted with these interviews and have found it to be a highly selective process. One of my center directors has been known to interview 150 people and admit only 24, even when he knew that the demand exceeded that number. We sincerely believe that this selectivity pays off in fewer problems for the local program directors and in increased teacher effectiveness. It also must influence the per cent of retention of teachers in the field. One of our center directors made a follow-up study covering a great many years and found a better than 80 per cent retention for those who had completed the program. We might compare this with the startling figures reported in the May 1970 edition of Phi Delta Kappan concerning the attrition rate among graduates of teacher education colleges. A study released by the U. S. Office of Education showed a loss of 30 per cent who never enter teaching and a further loss of 60 per cent who leave within five years.* Granted that those figures include large number of girls who marry at or before graduation, there must be some moral to be drawn concerning selection procedures.

When the interviews have been completed and the final selections made, each selected candidate is required to take and pass the manipulative or practical part of our competency tests. I'm sure that some of you have already made note to ask how we could possibly have a test already prepared for each of the many instructional areas. Obviously we cannot. We have 25 tests that are currently up to date, with 10-15 under handling the applicant for whom we have no test available.

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* "Books," Phi Delta Kappan, May 1970, p.498

When the manipulative test score has been added to the candidate's file, a final judgment is made and he is accepted or notified of rejection. To date we have had no court challenges claiming infringement upon human rights when we have rejected an applicant. We have had a few instances of protest with threats to appeal to the governor but have not yet been compelled by any higher authority to reverse a decision.

Before turning to a discussion of our basic or introductory program, I should insert a word about our long-range plans for everyone who enters the program. Since my division is a part of the State University of New York, everyone entering the program must be admitted to the University. I feel very strongly that all vocational teacher education should be conducted by or through a university so that even the beginning courses which are offered in so many different ways in different states may be the first steps toward a bachelor's degree. We have done our people no favor through the years by allowing them to attain permanent certification without a degree. If they are intelligent enough to teach our children, they are intelligent enough to do college work. If the program that is offered leading to a degree is meaningful, few good vocational teachers will object to following it. I think we must keep in mind that even twenty years ago the scholarship and loan program for people of marginal means who wanted to attend college was much less comprehensive than it is today. Many people went to work who might, under more favorable circumstances, have gone to college. In many cases these are the people who respond to the challenge to become teachers even at middle age.

Having selected our students we are immediately faced with the fact that at least 70 per cent of them will begin teaching at approximately the same time they enter our basic program. As the year progresses additional numbers of them will accept positions so that by the end of the academic year as many as 90 out of a hundred may be employed. We acknowledge that it is regrettable that we cannot hold them out of teaching until we have had a chance to provide them with a basic instructional program. They must, of course, continue in our classes, which are arranged on evenings and Saturdays; and to maintain their temporary certification they must pursue these courses without any major interruption.

To disgress for a moment, since the teacher education system is charged with the responsibility for finding, preparing, and recommending these people for certification, we feel very strongly that our voices should be heard and heeded when state certification requirements are set. Some states have persisted in lowering work experience requirements for no valid reason, since there is a larger supply of properly experienced people available than there is money available to train them as teachers. You will no doubt deduce that we are currently engaged in such a hassle in New York. New York and Ohio have been leaders in the area of maintenance of high standards for certification and by so doing have maintained a high level of T and I instruction. Some states have so watered down their requirements that they are offering little more than a high caliber industrial arts program. But in almost every case you will find that the teacher education divisions were not responsible for the lowering of standards and indeed have fought this action to the limits of their political power.

You are all aware that there have been endless attacks upon all teacher education programs, aimed at reducing the number of credit hours of required professional courses while increasing the number of hours in the specific teaching field. As our degree program is presently set up, we are permitted to grant 30 hours credit for successful completion of the trade test--the equivalent of a major in a subject area; 60 hours must be taken in liberal arts; and 32 hours are alloted to us to prepare the individual for his actual classroom and shop performance. The liberal arts people would like to increase their share to 90 hours, forgetting that, in effect, the hours granted for the trade test are equivalent to the block of time which the general elementary or secondary teacher would like to master English, German, biology, reading, or what have you. We are already left with what seems to us to be precious little time to indoctrinate our mechanic, cosmetologist, dressmaker, machinist, electrician or carpenter into the mysteries of handling a roomful of adolescents. There is a tremendous gap between the world of work and the classroom; and skill in a craft is no promise of skill in teaching.

We are compelled to begin on the lowest possible level of comprehension of the meaning of education as an occupation. Try to put yourself in the position of the man or woman whose only contact with education has been his own possibly unsatisfactory experience as a student and his intermittent contacts as a parent. Eliminate everything you have learned in college, in the classroom, or by exchange of ideas with your peers. Now where would I have to start to help you understand the nature of the job you were about to assume? Well, that is where we start--at the bottom--with an overview of the purposes, the objectives, and the philosophy of vocational education. We introduce the student to the entire field, trying to give him a picture of all the vocational services with enough of the underlying philosophy of each to assure a reasonably tolerant attitude. Vocational people can be as intolerant of each other as general educationists are of vocational people.

While each student cannot follow a rigidly prescribed progression of courses, we like to see him move next into analysis--not psychoanalysis but job analysis. He already knows his job but he has to be taught how to think of it in terms of classroom presentation. He seldom realizes how little the high school student knows about any skill and he must be helped to an understanding that nothing can be taken for granted. He learns to think of his trade in sequential terms and to see it as a succession of interlocking experiences.

Course organization follows analysis. The student learns how to organize the content of his course into a sequence for teaching. He learns to consider the age of the youth who will take the course, the level of communication skills they will probably possess, the skill difficulty level that is appropriate for the age group, and the amount of time available for each class period and for the total course. Throughout the organization course, he is encouraged to concern himself with the relevance of each part of his outline to the industrial or trade situation as it actually exists.

Methods of teaching--that much maligned title--is a course which we consider vital in this early period of our new teacher's experience. The ability to translate one's own experience into terms that are understandable to the adolescent, techniques for catching and holding attention, classroom or shop organization, practical approaches to discipline are only a few of the topics that are considered in a methods course. Many of us who are graduates of colleges of education still harbour feelings of resentment over the failure of our instructors to prepare us for the realities of life in the classroom. We make every effort to avoid the POLLYANNA approach and to offer instead some pragmatic advice that will at least support the new teacher until he is confident enough to develop his own approaches.

At this point we try to work in a course in educational psychology, taught in our centers by a member of our college psychology department or taken at another unit of the State University. Knowledge of how children learn and how they forget as well as how they react to certain stimuli is important in all educational planning. Such knowledge affects the interpersonal relationships between teacher and student and certainly is prerequisite to our course in evaluation of instruction.

Learning how to construct a test, how to administer and score it, and how to evaluate its results is a valuable tool for any teacher. Even if he relies more heavily upon performance than upon written evaluative instruments, he can use his knowledge to judge the reliability and validity of such tests as are given. Even a short teacher-made quiz can be subjected to evaluation, frequently resulting in embarrassment for the maker.

Perhaps even more important to our beginning teacher is the knowledge that not all testing has student evaluation as its purpose. The various reasons for testing--instruction, diagnosis, etc.-- are emphasized, helping to put the entire testing program into proper perspective. If our teachers will carry this knowledge into their practice much of the student resentment against tests can be softened, with resulting gains for pupil-teacher relationships.

Demonstration teaching is a course which has been greatly altered in recent years by the addition of micro-teaching and video-tape recording. In 1968-69 we cooperated with the Center for Research and Leadership Development in Vocational and Technical Education at Ohio State in a study to determine the merit of these techniques as an aide in our student teaching program. We discovered that rapid feed-back, allowing the student teacher to see the segment of teaching which had been recorded and to make an immediate self-critique before anyone else is allowed to offer any criticism, is immensely important. He inevitably caught his most glaring errors or omissions and was thus in a position to point them out himself.

We are all well enough aware of the operation of the defense mechanism in our own behavior to recognize that if we are thrown on the defensive we tend to gloss over our own errors in the course of our defense. By offering immediate feed-back of the tape, we put the student in a position which allows him to point out his own most obvious weaknesses and then ask for advice or additional criticism from the instructor or the members of the class.

We have always, of course, used demonstration teaching as a part of our teacher preparation program, with demonstrations performed before the peer group and with the instructor acting as chief critic. Even though the student has always been given the opportunity for self-criticism before anyone else speaks, he has not been able to offer a particularly valid critique of his own work since he has only his memory to rely on. The instructor inevitably is burdened with the task of criticism, since the other students in the class tend to be reserved in their comments. We see in the development of video-tape recording a substantially new role for both the teacher educator and class members as consultants rather than judge and jury.

A further advantage which accrues to both student and instructor from the nature of the micro-teaching experience is the student's acceptance of the need for careful planning. Those of you who have known the pain of trying to convince the beginning teacher of the necessity for planning would be delighted to observe the effect which the five to eight minute time limit has upon the student. He may not have his four steps well-outlined and organized the first time; but he learns quickly when he finds himself cut off in the middle of step two. He learns that he has a limited amount of time to establish rapport with his class, present his subject matter concisely and in language his students can understand, allow for a return demonstration or explanation, and move to the evaluative step to learn whether he has really made his point.

In some of our teacher-training classes we have students who have had teaching experience--some for instance with experience teaching in a two-year college. They find it particulary hard to believe that all this talk about planning and precision applies to them. Working with post high school age groups, they may have developed a habit of rambling, lengthy introductions, possibly in a misguided effort to establish a man-to-man relationship. We have not found anything more effective than the embarrassment they feel on seeing themselves recorded on tape with their time gone before they have even started the lesson. Until any individual recognizes his own inadequacy, he can do nothing to remedy it. We are seeing the possibility of some rather far-reaching implications for application to methods classes not directly concerned with student teaching.

A practice teaching and observation course follows demonstration teaching. One requirement is the making of observations of acknowledged master teachers with a lengthy critique on each visit. We find that observation techniques are much sharper after the student has participated in the demonstration teaching course.

Audio visual methods and materials of instruction may be taken at any point in the sequence of courses. Our AV department at Oswego tailors the course somewhat to emphasize techniques that are particularly applicable to vocational technical subjects.

We conclude our 32 hour block of professional courses with a professional block in favor of additional liberal arts courses, we are compelled to justify our insistence upon retaining our present requirements. All of the members of my staff have been teachers. As we look at each of the eleven courses, we can see none which could be eliminated without loss to the student. On the contrary we have to guard against a desire to cram more and more into each course as the demands on T and I education increase. We are charged with providing classes for the mentally handicapped and for those crippled by social and cultural deprivation. We are expected to prepare teachers who will be able to cooperate with other vocational services to provide courses which cut across long-established lines. We hear rumblings of demands that no child be permitted to graduate from high school until he has acquired a salable skill. We may, in the end, be required to produce teachers who are, literally, all things to all people.

Since all speeches must end with a summary let me summarize not the contents of this paper but a few thoughts on how we can improve the preparation of teachers for work in metropolitan areas. I obviously do not believe that we have been doing an inadequate job, considering the time and money we have had available. I should, however, like to see our teacher education centers provided with enough money to allow us first to pre-train our teachers so that no one begins his teaching career until he has completed the basic 32 hour program. This would obviously involve the admission of many more candidates and would, of course, require a buffer period before we could accummulate a pool of trained personnel. Second, I would like enough money to provide supervisory service in the shop and classroom for all first year and, if necessary, some second year teachers. Sending an inexperienced, partially prepared teacher into a school and abandoning him to the sketchy supervision of a busy building principal or a local director is a shortsighted procedure. If we could provide the support of a teacher-trainer on a regular schedule of visits and observation, our new teachers would benefit out of all proportion to the money expended.

There is actually no lack of funds in the federal appropriations but the newest legislation does not earmark these funds for teacher education. In other words the law specifies that adequate training activities are to be conducted, then proceeds to make a lump sum allocation to the state to be expended at the discretion of the state director. If the director happens to feel that more political hay may be made by program development or equipment purchase he may eliminate teacher education from his budget altogether.

Money, certainly, is no substitute for quality but in these days of runaway inflation, we must have money to expand our operations and to attract and hold people with the enthusiasm and intelligence necessary to implement an adequate program of teacher education.

CONCERN AND RESPECT FOR THE CHILD YOU ARE TEACHING

By

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Most of your preconceived ideas about the inner-city youngster and the community in which he lives are atrociously in error: and if these misconceptions are not corrected soon, teachers are going to run into more problems than they now have or will be able to handle.

If one were to try to list the number of "myths", he would find little time to do much else. Since I am interested in doing much more than listing, I shall give only three rather typical "myths" and then share my thinking with you on ways in which to deal with these misconceptions.

Let me presume for a moment that there would be no one here unsure of my definition. I shall quote from Webster's Seventh Collegiate Dictionary - "Myth: a person or thing having only an imaginary or unverifiable existence; an ill-founded belief held uncritically, especially by an interested group".

Let me presume again. Permit me to feel as if you are "an interested group". Otherwise, nothing that I shall say will have much meaning for you. Both you and I know that interest not only in her work but fundamentally in her students is essential for a teacher. If you are a teacher, you should have discovered by now that youngsters start school wanting to learn. You should also have discovered that each youngster differs in his learning capacity. Moreover, if you are concerned you should have begun to realize that some of the subjects that you are teaching the youngster have no bearing on or relevance to his cultural background or to his community. I pose the question: "To what extent can a youngster relate or should be expected to relate to concepts which ignore things which have meaning to him? Instead of being disgusted by the way some of the children look (some have slightly soiled or run-down shoes; others have no coat or rubbers for foul weather) ; why not harness that same disgust toward learning. Some of the why's: (1) Learn what that child's background is, (2) Seek to develop empathy--not sympathy, mind you! They have had enough of that. (3) Direct your talents toward helping that youngster read better, to write better as well as to learn basic arithmetic by doing all these things, and many more, keeping in mind that each youngster should be expected and helped to produce to the best of his learning capacity. Remember that education must relate to youngsters and to their lives' styles. What do you know--anything about the children you teach or the community in which they live? What makes black children so very different from other children? They are humans--very much so! They suffer, cry, laugh, and have the same mentality as any other individuals of different races, creeds or colors. You are going to have to learn about the community and that it has within it the good as well as the bad. Through your own association in the community you will come to know and understand many of the wise.

I think we are molded by persons with whom we have close relations, notably our parents and our teachers. It is not merely what we do, but also what we are that influences persons in our charge. Youngsters become what they are by identifying with and imitating us. There is, therefore, a new ethical duty which falls upon all of us as adults: to become free, loving, warm, cooperative, affirmative personalities.

Second Myth! You say that parents aren't interested in the education or welfare of their children. Oh, we know that there are a few parents inevery race who are not concerned. But basically and over all, most parents regardless of what they are--be it a housewife, a welfare client, an ADC, a strumpet or a harlot--care about their children.

Often, whether you know it or not (and some of you haven't taken the necessary steps to find out) some of the parents do not know what their youngsters are doing in school, especially insofar as their behavior is concerned. Many of the same youngsters who misbehave at school toe the mark at home. Consequently, you will need to take the necessary steps to reach parents or use other resrouces in the community. Often, many of these parents will not be home because they are working or moonlighting. With effort, you will usually discover that there are agencies or recreational centers in the community in which many of the youngsters are known by the community workers or directors of various centers. Reach these resource persons and you will get a long way toward reaching the students.

The Third Myth: inner-city children, hyperactive and extremely mischievous, don't respect white teachers. Let's face the facts! Respect, a quality which is earned, is color-blind.

Just as I will and do respond to you fairly much as you act toward me, so it is with youngsters and their teachers, regardless of color. Youngsters don't really respect teachers whom they can hoodwink and who give them free rein. Understandably, youngsters like to enjoy themselves; and they will go as far as they are allowed. During recess or lunch period or any other unstructured period within the day, talk with youngsters and you will gain insights into the things that they appreciate and the people whom they respect. Your job is to teach, a responsibility which you violate once you become too friendly and too much concerned with being liked as a person to the exclusion of your being liked as a teacher. When teachers teach, youngsters learn. Most inner-city youngsters learn because of the teachers, not in spite of them. Therefore, I charge you to be concerned and to show respect for the children you are teaching. To accomplish that, you cannot be a 2 x 4 teacher: one who always stays between the two covers of the textbook and within the four walls of the classroom.

THE EDUCATIONAL PROFESSIONAL DEVELOPMENT ACT AND TEACHER EDUCATION

By

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Based on the article "Getting Into the EPD Act"
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A High school counselor, expert in directing students to suitable colleges, exhibits appalling ignorance when it comes to advising about opportunities in the world of work.

A home economics teacher, wise in the ways of efficient food preparation and household management, is woefully unprepared to teach consumer education--a vital element in efficient budgeting.

A superintendent is acutely aware of the gap between occupational and general education and seeks ways to interrelate the two so that one reinforces the other.

An industrial recruiter voices despair as he observes the lag between what is taught in the schools and what is practiced in industry. He concludes that industry must find sources other than the schools to provide competent manpower.

A manpower expert observes the heavy emphasis on machine shop and carpentry and other yesterday-oriented programs. He shakes his head knowingly as he thinks of the potential for persons trained in police and fire sciences, health and medical services, industrial and engineering technologies, and the host of other emerging occupations.

An economist tries to reconcile the manpower needs of the country with the skills young people are learning, and he comes up with painfully lopsided charts and graphs.

A parent in a poverty area, himself a victim of blind-alley employment, harbors ambitions for his sons. But he doubts that they will have readier access than he did to jobs offering responsibility and advancement.

These may all be hypothetical characters and they do not typify all of the problems inherent in the present state of vocational education. But there is nothing hypothetical about the circumstances, predicaments, and apprehensions they reflect. They exhibit in microcosm the plight of all persons concerned with changing the direction of vocational education and changing its relationships with all education.

When I say "concerned persons" I am not confining the term to educators, for occupational training is the first step toward meaningful employment. Employment is directly related to the country's economic and social health. It is reflected in the gross national product as graphically as in the shattered glass of riot-pocked cities. Both manpower needs of industry and employment needs of citizens have worked their way into the platforms of political parties and onto the agendas of the highest councils of the government.

Much of what is now being recognized is what forward-looking educators, both vocational and otherwise, have been saying for a long time. The message is coming across loud and clear, and so are some of the strategies for effecting desired change.

I see a basic strategy in the provisions of the Education Professions Development Act. It says, in effect, that the kind of educational change we are seeking requires one thing -- changing people. It means re-educating the education professions in the kinds of attitudes, and skills, and knowledge they need to perform effectively in a new setting and under new conditions. That means changing ourselves and everyone else who has anything to do with running or serving the schools - teachers, aides, counselors, superintendents, teachers of teachers. It means recruiting and training new kinds of people.

In the case of vocational education, it means persons with up-to-date skills in developing industries and services who may teach either full or part-time - who will move the campus towhere the action is, if necessary. It means retraining other personnel to meet the needs of the latter part of the twentieth century. It means establishing new relationships and accepting new concepts and attaching new values to a variety of occupations and stripping them of their "humble" or "exalted" labels.

Further, it means accepting a whole new concept of what education should be.

Whether we like to admit it or not, our present school and college structure from kindergarten to graduate school, is geared to producing winners and losers. No one is more acutely aware of the debilitating and crushing effects of that structure than people in vocational education. The painful fact is that vocational education is, in academic circles, too often a euphemism for loser, whether the term is applied to teachers or students, although the growth of two-year community colleges is beginning to ease this situation somewhat.

SNOBBERY & REVERSE SNOBBERY

This circumstance can be traced in part to the pecking order educators have established within their ranks, an order that has been compared to the barnyard hierarchy that brings the stronger, more confident chickens to the feeding trough before the skinny, introverted ones. Our pecking order is only slightly more genteel. It is characterized by a kind of academic snobbism that says those of us who teach English or mathematics rate a favored position at the trough ahead of those who teach all of the "grubby" vocational and technical subjects or those who teach in the home economics department.

We've consigned a good many fields to their own little subject-area ghettos and we've ignored them and the students in them far too long. On the other side of the coin, it would be dishonest to ignore the reverse snobbism applied toward people who are "academic," who can't qualify on the vocational payroll, who themselves can't perform in a skilled occupation.

How can the Education Professions Development Act right past wrongs? No act of Congress can by its wording bring about the kind of movement and change we are seeking. What it can and does do is open up a series of opportunities to bring about changes in ourselves. It has given us an option to invest in a better integration of vocational and general education, to peel "voc ed" or "academic" labels off both teachers and students, to break down the artificial barriers that separate us, to combine achievement in academic subjects with achievement in vocational subjects.

The Act, by its very nature forces a kind of ecumenical arrangement upon us. In the past, vocational and technical education programs have been grouped together under legislation isolated from other education measures -- the Smith-Hughes Act, the George-Barden Act, the Vocational Education Act of 1963. Many of these were either repealed or merged with the Vocational Education Amendments of 1968.

The Amendments placed the responsibility for training of educational personnel for vocational and technical subjects under the umbrella of EPDA, as Part F of the Act. As you must know by now, two new programs of training and development are offered under Part F: first, a graduate fellowship program for personnel in the vocational and technical education fields; and second, a program of inservice training for vocational and technical personnel at all levels.

For the first time, vocational education is part of the broad scene, interrelated with other fields and other subject areas. If we exploit the potential of the Act, we cannot help but rub new elbows, combine new forces, establish new relationships, and join in long overdue alliances. This should help break down the barriers and convince everyone involved that academic and vocational obligations need not be in conflict.

FUNDING IN TEN AREAS

What is the potential of the Act? The Bureau of Educational Personnel Development, which administers EPDA, has identified 10 specific problem areas and is funding projects designed to recruit, train, and retrain personnel in those areas. Vocational education is one. The others are:

Basic Studies - to improve the subject matter competency of teachers.

Career Opportunities - to attract persons, including veterans, from low-income areas into the schools on a work-study basis and permit them to climb a career ladder that could lead to teaching or other educational positions.

Early Childhood Education - to meet the growing need of personnel to work with children age 3 to 9.

Educational Administration - to increase the competence of people who now serve or intend to serve as administrators in elementary or secondary school systems.

More Effective School Personnel Utilization - to train personnel for new roles resulting from the adoption of differentiated staffing patterns.

Special Education - to train regular classroom personnel to meet the needs of handicapped children in regular classrooms.

Support Personnel - to train media specialists to assist teachers in designing, selecting, and employing materials and to increase the competence of present and future counselors, psychologists, and others engaged in pupil personnel services.

Teacher Leadership Development - a fellowship program to prepare participants for significant and responsible instructional and decision-making roles as teachers.

Trainers of Teacher Trainers - to increase the competence of those who train teacher trainers who in turn affect large numbers of educational personnel.

THE VOCATIONAL EMPHASIS

The vocational and technical education program itself is one on which we are putting heavy emphasis. We are supporting projects likely to provide for:

1. Exchange of personnel to insure the continuing relevance of training programs to the actual employment situation. These projects should involve either the exchange of vocational education teachers and other staff with skilled technicians or supervisors in industry, or cooperative teaching programs in vocational schools and experience in commercial, industrial, or other public or private related employment, as appropriate to the individual need.

2. Updating the competencies of experienced teachers, to familiarize them with new curricular developments and to expand the depth of their knowledge in their specialty.

3. Inservice training for all school personnel including vocational educators, academic teachers working directly with vocational educational programs, supervisory personnel coordinators, and guidance counselors. Projects having an on-the-job training component are encouraged.

4. Career ladder programs with a degree as an ultimate goal. These should be designed to improve the qualifications of persons entering or reentering the field of vocational education.

Project proposals may be submitted by state boards of vocational education in cooperation with institutions of higher learning, local school districts, and/or business and industry. Institutions of higher education may also develop projects if they offer graduate study in a comprehensive program of vocational education that is approved by the state board of vocational education. Participants in training projects apply to the project director, not to the Office of Education.

PROGRAM MIX ENCOURAGED

To make the vocational education and other programs more effective, we are encouraging a cross pollination of one program with another. For instance, there is a specific provision for institutions of higher education and state and local education agencies to develop projects with a vocational education component and submit them under one of the other nine program areas.

I see no reason, for instance, why a project to train kindergarten teachers to offer youngsters a realistic picture of the many occupations and skills and services required in this complicated world could not be submitted under the Early Childhood Education Program. Projects submitted under the Support Personnel Program are a natural for training and retraining counselors who are deficient in advising about job requirements and opportunities.

Certainly there is a crying need for vocational education teachers to prepare the handicapped for suitable occupations. That element can readily be worked into projects submitted under the Special Education Program.

While vocational education teachers are not eligible to submit project proposals on their own, I would hope they would put pressure on their local and state agencies to be included in the planning and development stages. I suspect that the most effective projects will be those which tap the experience and knowledge of vocational education people who are actually in the classrooms and workshops.

Still another avenue is open for support of vocational education projects under EPDA. Part B-2 of the Act provides for a state-grants program to meet immediate critical shortages of classroom personnel and aides. The projects are developed and submitted to the states by local education agencies, a level at which teachers and other personnel may participate more readily in the planning.

Since the state-grants program specifically encourages recruitment of persons from the community who may be "otherwise engaged," I see an opportunity to tap persons from industry, service occupations, and the like who could serve either full or part time. This is the kind of recruitment we have been eyeing for a long time, and now we have a tailor-made vehicle for moving ahead.

I began this article by voicing some of the circumstances, predicaments, apprehensions, and frustrations common to persons in vocational education. The Education Professions Development Act cannot allay all of them. But it is a start in the right direction, and it can help make vocational education a part of the bold new strategy that is on the drawing board for all education -- one which promises a free, open, compassionate, non-racist, multicultural, and productive system.

Basic to that strategy is the re-education of the education professions in the techniques of equalizing and individualizing and humanizing all of education, and doing so in ways which have a multiplier effect.

The solutions we find to educational problems are going to be better solutions if they grow out of the kind of collaboration the Education Professions Development Act requires. I welcome the opportunity we now have to learn from one another.

"PREPARING TEACHERS FOR POST-SECONDARY VOCATIONAL EDUCATION PROGRAMS"

By

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It is an extreme pleasure to have this opportunity to participate in a most timely institute devoted to vocational teaching. In reviewing the research regarding teacher education for vocational education teachers, one of the most recent in-depth study related to this topic was undertaken by Dr. John Walsh and reported in OE-84006 publication Teacher Competencies.

The study by Walsh (1958) included 514 successful teachers of trade and industrial subjects. The knowledge, understanding, concepts, skills and abilities identified and described as essential to teaching related to the following:

- Orientation to public education
- Interpersonal and group relations
- Understanding the student and learning situation
- Developing functional curriculums
- Selecting, developing and using instructional materials
- Teaching methods
- Shop and classroom organization and management.

According to Walsh the teachers were emphatic in selecting trade analysis and course construction, methods of teaching, and development of instructional materials as the three courses contributing to their teaching success.

Review of research regarding preparation of teachers for post-secondary vocational-technical education programs indicates need for a national study somewhat similar to Walsh's research to bring into focus areas in our present day teacher education curriculums which need revision(s). Perhaps one of the outcomes of this institute will be a proposal to undertake such a study to involve all vocational-technical teacher education groups since Walsh's study was based on trade and industrial education teachers.

INFLUENCING FACTORS

The process of developing a curriculum involves a number of activities and considerations. Curriculum examination, appraisal, evaluation and revision are essential to keep educational offerings at a productive level and equal to the demands of a dynamic society and troubled world. Relevancy, seemingly an overworked term, plays an important role in our design of the vocational-technical teacher education curriculum.

According to Wood (1963), it has been said that curriculum is molded by time, place and circumstance. What are some of the factors and forces that potentially effect establishment of a vocational-technical teacher education curriculum?

Any attempt to identify all of the factors which might influence curriculum design would be futile. Traditionally, one of the factors to be considered would be accreditation agencies. Accreditation must be considered from standpoint of state, regional and national teacher education accreditation as well as those agencies responsible for institutional or program accreditation. At the present time since we do not have an agency responsible for accreditation of technical teacher education programs many teacher education institutions employ the standards of the National Council for Accreditation of Teacher Education (NCATE) and the state agency responsible for teacher certification. In addition it is possible that the standards of the regional accrediting agency may have some influence on the curriculum design.

Another factor, briefly mentioned in accreditation, would be the status of teacher certification requirements. State vocational-technical certification studies by Cottrell (1970) and Fagan (1968) revealed considerable variation from state to state. On the post-secondary school level a number of states do not employ teacher certification standards or requirements.

A third factor influencing design of the vocational-technical teacher education curriculum may be identified as the "consultant body." Frequently a teacher education institution may employ outside consultant(s) to assist in formulating the curriculum and it is possible that the background and experience of the consultant(s) may greatly influence the curriculum structure. The employment of an advisory committee is highly recommended with the caution that the committee be representative of employing institutions as well as state vocational-technical department personnel and if possible recent graduates.

The philosophy, goals and organizational structure of the state agencies responsible for post-secondary vocational-technical education programs may be another area to consider as influencing the design of the teacher education curriculum. Added to the philosophy and goals of the state agencies may be the philosophy and goals of local administrative units. Technical education at one time was concerned with occupations closely related to engineering or manufacturing and industrial areas of our economy. Today this term has taken on a much broader concept and the title of technical education is now found not only in fields of engineering, science, manufacturing and research, but in business, health, life sciences, distribution and agriculture or combinations of the aforementioned. During the period of growth in technical education programs we have witnessed the expansion of junior and/or community colleges and provisions for post-secondary vocational-technical education within this structure.

Other factors which must be considered include federal and state legislation pertaining to vocational education, degree of articulation and coordination of secondary and post-secondary vocational education programs, special projects and/or pilot programs initiated by state agencies, financial assistance available for vocational teacher education and receptiveness of colleges and universities to share (financially and philosophically) in the preparation and in-service programs in vocational teacher education.

CONCERNS AND CHALLENGES

As we plan programs for vocational-technical teachers it might be well to keep in mind the factors briefly discussed and plan a new approach for teacher education rather than spend our time reviewing the traditional or typical patterns related to specific courses. It is believed that to break from tradition is important since concerns regarding relevancy, flexibility and the demands of the inner-city, urban, rural, and world affairs currently places more demands on our teachers than any time in our history.

As we look at a number of our current problems I am reminded of a number of vocational programs aimed at low income groups and the failure of such programs to fully accomplish their goals. Programs such as

"Operation, Second Chance," "Bootstrap," "Earning and Learning" and others did not fully succeed due to inadequate preparation of the leaders and teachers of such programs. In one instance, programs were developed in a large city, yet no provision was made for transporting the unemployed and underemployed from their homes to the school. In another case where transportation was provided the program lacked coordination and supervision and as a result the prospective students merely used the transportation as a means of travel to the city: students would obtain the transportation, attend one or two hours of class/laboratory instruction and disappear until time to return home. Another example of lack of planning is shown in the case where a person was employed to coordinate a community project and was unable to relate to the "real" problems of the unemployed or underemployed. The latter case was salvaged when the administration analyzed the problem and assigned a team (black and white) to coordinate the program.

This is not to say we should rid ourselves of the traditional approach to the preparation of teachers. However it may be that we must take a closer look at the courses being offered and not only consider changes in course content but giving some thought to a different approach to preparing teachers. Traditionally the prospective teacher is given a course in methods, a course in introduction to education, and exposure to principles and history of education. Following the introductory courses the student must pursue a list of general education courses; subject matter, technical or other specialized courses; complete the series of professional courses capped off by student teaching. Traditionally there has been very little time devoted to observation prior to student teaching. A number of teacher education institutions have initiated observation opportunities as a part of the "early" experience in the curriculum, whereby students are afforded the time to serve as teacher aides in secondary schools, technical institutes, community colleges and in some cases correctional institutions.

A recent publication Teachers for the Real World (1968), American Association of Colleges for Teacher Education, points out the need for reviewing the present day teacher education curriculum. The following statement from the AACTE pinpoints this concern:

> "Unless there is scrupulous self-appraisal, unless every aspect of teacher training is carefully reviewed, the changes initiated in teacher preparation as a result of the current crises will be, like so many changes which have gone before, 'merely differences which make no difference'."

How is it possible to design a vocational teacher education curriculum without the knowledge of inner-city problems, knowledge of the needs of youth, knowledge of the demands of employing institutions, and the expectations from agriculture, business and industry with regard to the vocational-technical students they anticipate employing? How is it possible for a teacher education institution to prepare teachers if the college or university is unaware of the socio-economic conditions and learning environment of the inner-city? Dr. Virgil Lagomarcino (1969) in a presentation during the Third Annual National Vocational-Technical Teacher Education Seminar held in Miami, Florida stated what may be a summary to this challenge:

> "It seems to me that in vocational-technical teacher education our concern is two-fold. One, we need to prepare students to become employable participants in the 'existing world of work.' Two, we need to help them to be inherently flexible and prepared for new demands that will emerge as a result of the changing society."

The education of teachers is no longer the exclusive province of colleges and universities responsible for teacher preparation. It is a major problem which requires the cooperation of the teacher education institutions, school systems, state departments and the community. With this in mind it appears difficult to develop a national model of preparing vocational-technical teachers. Attention must be directed to teacher education institutions to work in cooperation with the communities they serve to develop their own model program.

PROGRAM APPROACHES

In attempting to develop programs for vocational-technical teacher education a report by Joseph P. Arnold (1967) may prove helpful. The document prepared by Arnold contains guidelines aimed at providing direction for those involved in initiating or revising baccalaureate technical teacher (post-secondary) education programs. The following guidelines represent the culmination of organized effort by participants and presentations by speakers during the Institute for the Improvement of Technical Teacher Education Programs conducted at Purdue University, summer 1967. The guidelines were developed within six categories, namely: (a) General Education, (b) Mathematics, (c) Science, (d) Technical Content, (e) Occupational Experience, and (f) Professional Education. The guidelines are as follows:

General Guidelines

1. The level of instruction for the technical teacher (particularly in science, mathematics, and the technical areas) should be at least commensurate with that expected of the graduates of the technical program in which the prospective teacher is most likely to be placed.

2. Coursework and other instructional activities for the technical teacher should, whenever possible, reflect an understanding and awareness of the functional role of the graduates of the program in which the technical teacher is most likely to serve.

3. Balance between theoretical and applied content for the technical teacher should be carefully established and maintained to provide a meaningful frame of reference while retaining the theoretical basis necessary for adjustment to technological advances.

General Education Guidelines

1. Courses and activities which enable the technical teacher to communicate ideas mathematically, linguistically, and graphically should be included in the program.

2. Non-technical elective courses and related activities should be required as part of the program to enrich the technical teacher's academic background.

3. Instruction in the social sciences should be provided to broaden the technical teacher's awareness, understanding, and intelligent participation in the activities of a complex society.

Mathematics Guidelines

1. Mathematical knowledge and facility for the technical teacher should be at least equivalent to that expected of graduates of the type of technical program for which the teacher is being prepared.

2. Additional mathematical competency (beyond that outlined in the preceding guideline) should be required of the technical teacher in programs where the technology demands additional competency in order to understand and communicate the technical content.

3. Mathematics courses for the technical teacher should emphasize applications appropriate to the orientation and job function of the technician.

Science Guidelines

1. Scientific knowledge required of the technical teacher should be at least equivalent to that expected of graduates of the type and level of technical program for which the teacher is being prepared.

2. Additional scientific background (beyond that outlined in the preceding guideline) may be required for study in those technologies where additional depth and/or breadth is necessary to understand and communicate the scientific bases of the technical content.

3. Science courses should provide the technical teacher with the laboratory emphasis appropriate to the job function of the technician.

Technical Content Guidelines

1. Depth and breadth in technical courses for the prospective teacher should extend beyond that required of the graduates of the program in which employment as a teacher is anticipated.

2. Technical content for the prospective teacher should be integrated with science, mathematics, communications, and professional courses.

3. Technical content for the prospective teacher should be distributed and scheduled throughout the entire span of the baccalaureate program.

4. Technical content for the prospective teacher should employ a laboratory emphasis which strongly relates to the occupational objective of students in the type of program for which the prospective teacher is preparing.

Occupational Experience Guidelines

1. Technical level occupational experience should provide the teacher with depth and breadth as well as knowledge of current industrial or business practice at a level minimally commensurate with that associated with the employment expectations of graduates of technical programs of the type and level for which the prospective teacher is being prepared.

2. Occupational experience requirements for the prospective teacher should emphasize prearranged, supervised, cooperative programs rather than evaluation of previously obtained employment experience.

3. The amount and emphasis of occupational experience required of the technical teacher should relate to the requirement of the technology.

4. The major portion of the occupational experience of the teacher can often follow graduation from the baccalaureate program.

Professional Education Guidelines

1. Professional courses for the technical teacher should focus on the adult as a learner.

2. An integrated sequence of professional courses should be designed to provide the prospective teacher with an understanding of the methods and problems associated with technical teaching.

3. The evolution and function of technical education should be taught in the technical teacher education program.

4. A supervised teaching experience or teaching internship should be completed in the technology in which the student is being prepared to teach.

One of the first questions to come to the surface early in designing a vocational-technical teacher education program usually involves a decision as to establishing a curriculum for each of the vocational-technical disciplines or developing a technical education curriculum with options in the major vocational-technical areas. In either case the next question arises as to identifying those courses which may be considered as the core of subject matter for the professional education needs for teachers of vocational-technical education. Another consideration early in the planning stage usually involves the question as to the level of instruction or type of technical education program the teachers plan to enter, i.e., Associate degree, diploma, certificate or other similar designations.

SUMMARY AND CONCLUSIONS

Although we have not mentioned in-service teacher education it is imperative that in-service training be carried on in tandem with the pre-service effort. Close working relationship of the colleges and universities must consider graduate programs in vocational-technical education to increase the leadership capabilities on a long range basis. Graduate programs must be available for teachers as well as for those planning careers in administration and/or supervision.

To insure a coordinate program of vocational-technical teacher education it is considered essential that some thought be given to a statewide council of vocational-technical teacher education with representatives of higher education -- secondary and post-secondary schools (teachers and administrators), state departments (divisions) of vocational education, industry, business, health, agriculture and professional organizations.

Finally, continuous evaluation or appraisal must be present to effectively meet the needs and demands of teacher education as well as certification requirements. The impact of instructional technology places an added dimension to evaluation of teacher effectiveness and the role teacher education institutions should take in preparing teachers.

I trust as we reshape our teacher education program in vocational-technical education that a new inspired educational partnership between the university, state department or division of vocational-technical education, local school units, and the community will provide the basis for making necessary changes.

THE RELEVANT CURRICULUM

By

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If someone were to ask me for my definition of good education, I would, of necessity, have to over-simplify, but it would come down to: relationships between teacher and pupil and a relevant curriculum. The lack of these two conditions is, I believe, at the source of much of the turbulence and disturbances we read about in the newspapers.

Human relationships in the school environment are many-faceted and complicated. For example: What is the relationship between the academic faculty and the vocational faculty? Is there, on the one hand, a feeling of disdain or even outright hostility, a feeling of superiority? How does the academically oriented teacher feel about that uncooperative kid in the dungarees who cares only about the auto shop? How does the college-prep student feel about the vocational student? Is the vocational student socially acceptable or is he a second-class citizen?

Would that I could give positive answers to these queries, but I am not too sure that if I did, I would be right.

You may, at this point, well ask, "What has all this to do with relevant curriculum?" The answer, I think, is that you can't have relevant curriculum without a teacher who understands and, if not loves, at least has empathy for the pupil who is not the "hot shot" on the way to Harvard.

Doesn't this have implications for teacher training? Yes, somehow it all goes way back to that every time.

"Hardware" courses for teachers we have plenty of. How to make a progress chart, how to take care of records, etc. - this is available. But what of developing teachers who have a knowledge of the human condition, an understanding of what makes these kids "run". How about teachers who are friends rather than enemies or, at best, indifferent?

Does the teacher know what happens to this pupil outside the school? Does the teacher know his friends, his home, his values? Or does the teacher see him through the spectacles of the great middle-class?

I think these understandings are more often than not, missing and perhaps it goes back, in part at least, to the kind of teacher training we have dished out.

I refer you to a page from a 1965 issue of Harpers which will be distributed at the conclusion of this talk. I call to your attention the cultural chasm between the middle class and the lower class. If the teacher doesn't see this chasm, he can't cross it.

Another point to make is that if a teacher is to improve his occupational orientation offerings, he should know something about occupations, either from observation or through experience, and not only from a book, even if it be the "Dictionary of Occupational Titles". Ergo: it would be a good thing if teachers of occupational orientation programs would know something about the world of work.

Thus, point one is the teacher.

A relevant curriculum must be geared to realities of life for the student: What does he need in order to succeed vocationally, personally, and socially? How does the curriculum help him to reach his success?

Obviously this means a new look at age-old courses (the kind I got when I went to high school). We must ask the difficult question: What goes in, and what goes out?

I throw you this curve - and then I'll duck. It is possible for a teacher to know too much about his subject for the good of his pupils. Let's take a history teacher. To him, history is a way of life and his whole being as an historian is embued with the beauty and importance of his field. The text book he uses or writes is extensive, inclusive, voluminous, detailed, annotated, footnoted, etc. and as a result, the kids never get beyond the first half. The second half of the book stays clean and the class is stuck forever, right in the middle of the Revolutionary War. Exaggerated? Sure, but there is a point to be made here. We must think about what is best for the pupil in the time available. We do not have unlimited time, so we must make choices - what stays in, what goes out. These choices must be based on the pupil's needs and not on what is academically respectable.

Since I was for many years a teacher of English in a vocational high school, I would like you to bear with me while I use English as an example of what I am talking about.

Traditional English courses offer little interest to the pupil who is a slow learner or a terminal student with a job objective. Therefore, the problem of motivating this type of youngster is crucial. We can be reasonably sure that we cannot motivate him in the traditional mode. The traditional English curriculum has been a failure with him and he with it. He couldn't care less. To persist in more of the same is simply to beat one's head against the same stone wall.

It is my view that what you leave out of a course is in a very real sense just as important as what you put into it. You can decide what to leave out only in the light of your aims. What do you expect your English course to accomplish for this pupil? What does this pupil need in order to succeed in his environment, not yours? What can the study of English bring to him to help him succeed in his world?

What is his world? Is it the world of the learned professional? Is it the world of the highly educated? Or is it the world of the worker, the craftsman, the serviceman? In an overwhelming number of instances, it is the latter world.

Remembering that this world is totally valid and vitally important to society, we must do our utmost to help the youngster to succeed in it.

Here we must make choices:

How much time should be given to grammar?
How much to literature and reading?
How much to written expression?
How much to oral expression?

From past experience it appears that a superstructure of grammar with all its rules and nomenclature is of little value and tends to be rejected as a basis for expression. To insist on having some pupils learn it leads only to frustration on both the teacher's and the student's part.

Students learn to express themselves by force of habit. Their teacher should, therefore, set up many situations in which they can practice good speech habits under some gentle guidance. The more opportunities available in class for student expression, the more likely the teacher's success.

We say gentle guidance advisedly, for the teacher must realize that language keeps changing. Many mistakes that were unacceptable yesterday are considered acceptable today.

The academic English teacher would do well to adjust his background in traditional grammar to the realities of modern usage and avoid moralizing or handing down rigid grammatical rules. He can insist to his students that "it should be this way", while in reality it may not be "this" way.

Several illustrations will suffice to underline this point.

It wasn't too long ago that the teacher insisted on the nominative pronoun after a form of "to be." Granted, "It is I" is grammatically correct, but how many of your pupils say it that way? How many adults say it that way?

Many people, it seems never have heard of "whom". The term is becoming obsolete.

"Everyone take his seat," is correct according to traditional grammar, but . . .

We recommend that the teacher listen carefully and list gross errors his students make - those still unacceptable today - and work on their elimination. Should he succeed in eradicating gross errors, he will have made a major contribution to his students. And he doesn't need to build that superstructure of grammar to do it.

In selecting reading materials for these students the teacher must think in terms of the students' interests. He should take the trouble to find out what his students want to read. This probably will not be literature as it has been traditionally taught. The greater the students' interest in the reading matter, the greater the opportunity for inculcating in them a liking for reading. A preliminary survey of the class or classes for a possible common interest is a sound basis upon which to develop the reading program.

In dealing with this type of student, we must first make him want to read. Therefore, the teacher should not be too distressed if his students' tastes are not very elevated. Even if the student starts at a level just above the comic strip, he has made a beginning. The teacher's task then is to develop the students' capacities, using the student's own tastes as the starting point.

Then, too, the teacher should be careful not to punish, knowingly, the youngster in whom he is trying to instill an enjoyment of reading. A prime example of this punishment is the written book report or test.

First we try to get a pupil to read; then when he does begin to read, and maybe even enjoys it a little bit, we clobber him with an unpleasant chore - a book report. In this way we build up an unfortunate association; read a book - write a report. Eventually the mere mention of reading a book carries with it an unpleasant connotation for the student.

It is far more profitable and interesting to the students if literature is dealt with in very informal, unstructured discussions, in which pupils converse about an interesting experience - a book they enjoyed reading.

It is not likely that the pupils we are dealing with will be required to write critical analyses of their reading as adults.

The facts of life seem to dictate for the overwhelming majority oral communication as the primary mode. Normally writing will involve a minimal effort - an occasional letter, making out a bill, requisitioning tools and materials from the stock room, filling out forms. The great need is for ease and clarity in speech. It can then be assumed that the effort in the classroom should be weighted rather heavily in favor of oral rather than written expression. Situations must be set up to allow these pupils maximum opportunities to express themselves - orally.

In addition to attempting to motivate a student by showing him how useful the material will be to him, the teacher should present this material in such a manner as to increase the pupil's chances for succeeding with it. Minds should be stretched, as the old cliche would have it, but only up to a point. Goals we set should be realistic and attainable. This means that vocabulary - improvement exercises should not be geared to raise the student to a high academic level of expression. Written and oral expression does not have to be literary, but only needs to be acceptable and express an idea with clarity. What we are looking for is a certain amount of improvement, an amount the pupil himself can accomplish and accept, and an amount his peer group will accept in their relations with him.

The teacher of the slow-learner group must try very hard to make his presentation interesting. He must put on a bit of a show by demonstrating to his students that he is enthusiastic about the material. He should use the pictorial approach as an important adjunct. For example, the overhead projector offers many opportunities for the imaginative teacher to win over his class. In the English class many lessons can be enhanced by using transparencies and the text as integral and complementary parts of a lesson.

It is my conviction that English for these pupils should be somewhat different from the English taught in an academic class. It should be practical, stripped of nonessentials, and wherever possible, related primarily to the world of work. It should be a useful tool.

Many of these students have developed a resentment toward English because of the way they have been exposed to it; to offer them more of the same would be self-defeating. We must try a new approach and we must sell that approach.

Why strew a pupil's path with false educational hurdles? We are not training editors, preachers, lecturers, writers; we are training workmen, and the English they need and will learn should be the prime factor determining what they are taught in their English classes.

The matter of "culture" has ever concerned the teacher, and he wants to expose his pupils to it. But expose to whose culture? The teacher's? Well, since it is usually the only culture with which he is familiar, it usually is the teacher's. And often this is wrong. Sometimes it is even hypocritical. Do we practice what we preach? We want our boys and girls to read the classics. Do we read the classics? Or is it more likely to be Portnoy's Complaint? Do we insist that the New York Times is a better newspaper than the New York Daily News? Granted. But then why is the Daily News in the teachers' room?

Are the old classics the only ones to read? Is there no modern writing that is worthy and relevant? The thing to do is to really find out what interests our pupils.

We need rethinking about English, and by extension, our other courses. We must motivate and one way to motivate is the job. So we must bring the job into the curriculum. We must reassess our definition of "culture" to fit the modern age and the social group of our students. We must use imagination in our methods of presentation.

Now that we retrained our teachers and taught them all about the relevant curriculum, we ought to give them an opportunity to do something about it.

I will describe one way to do it, as we in New Jersey do it. We utilize the curriculum laboratory.

The Vocational-Technical Curriculum Laboratory is housed at Rutgers and is a part of the Vocational-Technical Education Department in the Graduate School of Education. It must be made clear, that it is a child of the Division of Vocational Education of the New Jersey Department of Education . Because of this, there is a close working relationship between the Division and the Laboratory.

Physically, the laboratory is equipped to help teachers devise curriculum materials, edit them critically, prepare them for printing, print them, bind them and distribute them. This means we have a director, assistant director, editors, typists, proof readers, press operators, collators, binders, and mailers. We process the whole bit from the gleam in the teacher's eye to the finished product.

The overriding objective is to strengthen vocational education in New Jersey through curriculum development. In addition, we look upon this process as a means of teacher training. A teacher who goes through this process of curriculum organization, research, development, innovation, and methodology, surely must get something out of it.

The Curriculum Laboratory takes as its concern, any area the Division of Vocational Education takes as its concern. This would include these:

Introduction to Vocations
Vocational Guidance
Agriculture and Combinations thereof
Trades and Industries
Business and Office Occupations
Technical Occupations
Home Economics
Industrial Arts
Cooperative Education
Health Occupations
Maintenance Occupations
Service Occupations
Teacher Training
Occupations for Slow Learners
Training for the Disadvantaged

Or you might look at it this way:

Secondary Vocational Programs in High Schools
and Vocational High Schools
Evening Programs
Apprentice Programs
Special Needs Programs
Pre-vocational
Post High School
Technical Institutes
Community Colleges

Teachers to participate in curriculum development are selected in two ways: local appointments, and state appointments. The local appointment is determined by the staff of a local vocational program in relation to its local needs. A teacher or teachers are assigned to work on a curriculum problem pertinent to the local school system.

The state appointment is made by an appropriate supervisor from the Division of Vocational Education who identifies a problem of state-wide significance and the teachers who will work on it.

The designated participants are then well-briefed as to the scope of the project and the methods of accomplishing its completion. They then attend a workshop which lasts through the month of July at which time they work six hours per day to meeting their assignment. Since this is a Rutgers course, it offers three credits toward degree and for teacher certification. The teachers also receive a subsidy.

Where a project is finished by the writer, the Curriculum Laboratory brings it to completion, i.e. produces it. It can be a student text, workbook, teacher guide, course of study, lesson plans, guidelines for setting up a program, lesson sheets, tests and many more.

Then too, it can be the creative art work for overhead transparencies or it can be the production of single concept loop movie-films, or it can be colored-slides, or film strips.

I have brought samples of various printed items produced by us, and I should like at this point to demonstrate some of the things we have been doing with the overhead projector and the movie film.

"ROLE OF TEACHER EDUCATOR IN RESEARCH"

By

Robert L. Prater
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Houston, Texas

Dr. Righthand, Mr. Fellows, and participants in Institute No. 5 of the Eastern Metropolitan area series. It is always an inspiration to me to have the privilege of participating in an activity such as is being conducted here.

It is likewise a rewarding experience to visit the state of Connecticut. It is my first visit to your state and your city. Since I had to rely solely on printed materials about Connecticut, let us hope it was authentic. Among the several items which I noted, one stands out now is the state motto. There were three listed but the one, "Land of Steady Habits", seems to stick with me. I guess the critical aspects to this is to be sure the habit is a profitable one.

If my sources were correct, you are a state of about 3,000,000 with a non-white population of about 3%. It has a diversified economy with almost half of its nonagriculture workers employed in manufactures.

Our Institute Theme: "Improving the Preparation of Professional Personnel for Vocational Education in Metropolitan Areas" suggests that there is a recognition of the responsibility for the metropolitan areas in providing appropriate kinds of vocational education - appropriate both in quantity and quality. You are to be congratulated for putting forth this effort in an attempt to improve the quality of vocational education. The various topics you have programmed for discussion represent significant areas of concern.

As a participant in this institute, I have a special advantage by being from another state some distance from here. This way, I can be an expert since it is well-known that the farther one gets from his home base the more of an expert or specialist he can pretend to be. I prefer the word expert over specialist because the specialist is defined as "one who learns more and more about less and less until pretty soon he knows everything about nothing." Inasmuch as there is no one here who has known me over the years, I will not be in the embarassing position of the newly elected Baptist minister as related in this story I will recite to you. ("If thou seest me and knoweth me, say nothing and I will see thee later").

I wish it were possible to bring you a glowing report about the status of Vocational Education in the City of Houston and the State of Texas. Though some progress is being made, there is about 99% more to be done. A recent study, in which I was co-investigator revealed that vocational education is available only in a limited amount to many high school youth in that large metropolitan area. As would be expected still less is available for Blacks and Mexican Americans.

Our values are also mixed up as they are elsewhere in America. For example, we spent 40 million dollars to build a baseball field, put a roof on it and air-condition it, yet we will not train young people for decent jobs.

As I approach my topic: "The Role of Teacher Educator in Research", I do so with the senses of humility revealed in the biblical verse: "If any one imagine that he knows something, he does not yet know as he ought to know."(1 Corinthians, 8-2).

An examination of the many problems which face vocational education reminds us that an effective program of teacher preparation both pre-service and in-service will require the inclusion of the research component. The teacher, by the very nature of his closeness to the action, represents a potential researcher and should thus be encouraged and nurtured in this direction. The teacher educator can be a vital stimulus in this process.

The following statement by Rivlin[1] points out the critical vocational research need:

> "To sum up, one thing that is clearly wrong with vocational education is that we know so little about it. We badly need information about costs of alternative methods of training and about the income and employment histories of graduates. We need far more experimentation with new methods of teaching, new ways of combining classroom instruction and on-the-job training, and new methods of financing occupational training. We also need to examine the effects of local decision-making on the distribution of educational resources and to develop methods of transmitting the skill needs of the nation to local schools and individual students."

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[1] Rivlin, Alice M. "Critical Issues in the Development of Vocational Education." Unemployment in a Prosperous Economy, A Report of the Princeton Manpower Symposium.
(Edited by William G. Bowen and Frederick H. Harbison.) Princeton University Industrial Relations Section, Princeton, N. J., 1965, pp. 153-166.

Those of us in the field of vocational education and allied fields should be concerned about the paucity of scholarly research by our colleagues. I am also concerned about the fact that we seem to be depending on the researchers in other fields to provide us with the answers to our many questions.

THE MEANING AND IMPORTANCE OF VOCATIONAL RESEARCH

According to accepted definitions research is defined as "studious inquiry or examination; examination or experimentation aimed at the discovery and interpretation of facts, revision of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or laws." Vocational means that which relates to being in training in a skill or trade to be pursued as a career. Put together "vocational research" means a study of jobs, job training, job demands, etc. Vocational research includes the collection, analysis, and interpretation of information and data for presentation to administrators at all levels, to improve the decisions relative to vocational education. It is a quest for new knowledge or for a more useful interpretation of facts which are already known.

In recent years we have witnessed significant emphasis on the research activity in vocational education. This has been both in the production of research as well as in dissemination. Much of this has been due to the provision of Part C of the Vocational Education Act of 1963 and the subsequent amendment of 1968. However, much of the credit goes to individual initiative and efforts of many persons such as are represented by those of you who are present today.

In order to be specific in citing the apparent importance given to research in recent years, I remind you of the following events, publications:

1. An entire chapter of the 64th Yearbook of the National Society for the study of Education (1965) was devoted to: Research in Vocational Education (G. L. Brandon and Rupert Evans).
2. "Research Visibility" section the AVA Journal now in its third year. March 1970 issue devoted to the status of vocational research.
3. Review of Educational Research, 1962
4. National Conference on Research, Oklahoma State University,1969 (Research Handbook for Vocational-Technical Education).

5. "Manpower Needs, National Goals and Research Priorities in Vocational-Technical Education", by Leonard Lecht, Center for Priority Analysis, National Planning Association.

6. Establishment of the State Research Coordinating Units and the Centers for Occupational Education and for Vocational and Technical Education.

Vocational research, when viewed in its broad context, may incorporate numerous type studies. Some of the more common types and/or categories are as follows:

1. Manpower needs and employment opportunities.
2. Curriculum Development and Experimentation
3. Educational Programs
4. Instructional Materials and Devices
5. Learning Process and Teaching Methods
6. Student Personnel Services
7. Facilities and Equipment
8. Administration and Supervision
9. Teacher Education
10. Program Evaluation
11. Vocational Behavior
12. Organizational Structure
13. Occupational Information and Career Choice
14. Personal and Social Significance of Work

APPROACHES TO THE PROBLEMS

I submit that there are at least two dimensions to vocational research competencies, both of which can be influenced by the teacher educator. That is, the teacher educator must develop within the vocational teacher a desire to be both a consumer of research and a researcher. I cannot overemphasize the need for the teacher to be able to consume - that is, read and interpret the finding of research studies - as well as being able to gleam the underlying meaning, implications and in general, reading "between the lines." Only when you have a firm insight and understanding of the state of affairs of a given subject can you then proceed to explore and research the unanswered questions. The consumer of research deliberately and purposefully attempts to keep a storehouse of important statistical findings and data at his command either through memory or by some well-catalogued system for easy retrieval in time of need. Although many may disagree, I am convinced that one of the most probable generators of vocational research studies is one who lets significant statistical data and facts become embedded in his make-up. I refer, for example, to such findings below taken from various studies and reports. These are cited only as examples.

1. Of the millions of workers who enter the labor force during the 70's, only about 20% will be college graduates.

2. The percentage of Connecticut draftees who failed the mental induction exams in 1968 was 20.2% but for Mississippi the failure rate was 68.6%.

3. During the 1960's approximately 7.5 million youth dropped out of school before completing 12 years of school (N.E.A. Research Bulletin).

4. Thirty-four per cent of the white youth found jobs for which they were trained, while only 17 per cent of the Negro youth found jobs related to training received. (Houston Teenage Study - Robert L. Prater)

5. Thirty-three percent of the white graduates esimated that about half of their high school courses were vocationally oriented, whereas only 6% of the Negro graduates reported same. (Houston Teenage Employment Study - Prater and Champagne)

6. Although Negro workers in the HUES area had completed more years of school than their white counterparts (10.7) compared to 9.99 years), greater proportions of white workers held desirable jobs. Large proportions of white male high school graduates held managerial and professional and technical jobs, while Negro graduates were still frequently found in less skilled occupations. (Houston Urban Employment Survey). This was one of six urban surveys conducted July, 1968 to June 1969. In addition to Houston, it covered poverty areas in Atlanta, Chicago, Detroit, Los Angeles and New York.

Thirty-four percent of white youth found jobs for which they were vocationally trained; 17 percent of the Negro youth did. Forty-four percent of white youth found their vocational training not helpful in securing employment; 67 percent of the Negro youth felt the same way.

Thirteen percent of the white males were unemployed; 39 percent of Negro males were unemployed; 40 percent of white females were unemployed; 61 percent of Negro females were unemployed; 16 percent of white graduates were unemployed; 52 percent of Negro graduates were unemployed; 41 percent of white dropouts were unemployed; 54 percent of Negro dropouts were unemployed.

Most teenagers (85 percent of white and 97 of Negroes) report ;that they would enroll in job training if necessary for a better job.

Only small differences between white and Negro teenagers exist in respect to their opinions as to how much schooling is necessary for a good job. Thirty six percent of the whites feel high school or less is sufficient and 28 percent of Negroes feel the same. However, 27 percent of the graduates feel that way, but 40 percent of the dropouts do.

7. Work attitudes are an important frictional factor in the work experience of threshold workers. It will be the job of educators and society in general to attempt to cope with these frictions, to minimize unfavorable attitudes, and to capitalize on attitudes which are demonstrated to bring about a successful transition into the world of work for youth who are "on the threshold" ("Youth Unemployment Friction in the Threshold of the Work Career" - H. G. Heneman and Rene V. Davis - University of Minnesota).

8. Although education is the single greatest determinant of income for both white and Negroes, a Negro male over his lifetime earns only 47 to 64 percent of what his white counterpart with equal education can earn. In fact, a Negro college graduate will earn less over his lifetime than a white high school graduate.[2]

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[2] Wachtel, Dawn Day, The Negro and Discrimination in Employment, Institute of Labor and Industrial Relations. The University of Michigan-Wayne State University. 1965

The United States of America...richer in material wealth, higher in the percentage of people engaged in education--than any nation in the history of the world--enters the 1970's with this manpower imbalance...

> The greatest shortage of technical manpower in the nation's history.
>
> Yet, the world's highest unemployment rate among youth and the elderly, with 18 percent of all young Americans, 30 percent of young black Americans, unemployed.
>
> More than 3,000,000 illiterates in the adult population.
>
> Yet few jobs, and fewer each day, for illiterate and semi-literate people.
>
> Modern technology, while regularly creating new careers, automates 33,000 Americans out of jobs--each week.
>
> Yet, more than half the adults in the work force do not have a high school education on which to build new careers.
>
> Meanwhile, the System grinds on, quite indiscriminately, as if every secondary school student were destined to get a college degree - while in fact, 80 percent do not, and drop out, most of them unprepared for...the World-of-Work.[3]

I submit these comments to you because I feel that significant documented findings as above serve as springboards for the vocational researchers. As we approach our research endeavors we must do it with a broad understanding of the total situation in which we operate. We must not attempt to isolate ourselves from the rest of society. The problems of the vocational teacher and researcher are the problems of all society. Those who do not seriously recognize and understand such sobering statistics cannot truly be "turned on" in respect to vocational research and education.

In regards to the development of researchers per se there are several areas of responsibility which the teacher educator should be aware of and respond to positively. These are expressed basically as concerns and directions which are paramount in his teaching approach. These responsibilities may not always be obvious to the teacher educator but they should be part of his mission. They are as follows:

1. Promote the kinds of discussions - in and out of the classrooms which will challenge his students to see our society in its totality - its strengths, its weaknesses, its consistencies, its inconsistencies. We profess to be

vocational educators, first and foremost, but now and in the days ahead the effective vocational educator must also be a sociologist, an economist, a manpower specialist, vocational counselor, a civil rights activists, concerned that all people who desire it have the right to his commodity-vocational education.

2. Assure that his students are well-informed of the sources of potential support for research studies.

3. Encourage participation in professional organizations which are not traditionally thought of as "vocational" but which can provide some input which might strengthen our understanding of the role and scope of the vocational education in our society. We must rub elbows professionally with all kinds of persons.

4. Initiate discussions and programs in which the major concern will be the discussion of research findings. We know much more than we are making use of.

5. Encourage and participate in the dissemination of research findings with special emphasis on those which may be helpful in changing attitudes relative to the value of occupational training.

6. Utilize and acquaint the students with a variety of sources of state and local manpower projections - Employment Security, Labor Departments, etc., Resource Centers at various universities, School districts, etc.

7. Instill innovative ideas into the students by personal action, ideas and programs.

8. Strive to be a constant inspiration to those around you. ("The mediocre teacher tells, the good teacher tells, raises questions, etc., but the superior teacher inspires.")

9. Deliberately relate and inspire research interest in fields which represent areas of national concern with emphasis on implications of these trends for the future of vocational education. I refer to such things as air and water pollution, quality of life, crime control and prevention, equality of opportunity, educational and employment. For example, in projecting manpower and training needs. What consideration are we going to give to the fact that: (1) almost overnight we have approximately 500 companies engaged in the design and manufacture of pollution control

devices and that the House recently passed a $775 million dollars pullution bill, (2) that we might soon set out on an ambitious task of building 100 new small cities, or (3) that as millions of minorities begin to experience real equality of educational and employment opportunities ("The Good Life"). We will demand and be able to pay for an unimagineable amount of goods and services not within economic reach at this point. All of these are relevant issues, events and concerns which the teacher educator must make a part of his efforts to foster meaningful creative research in the profession. Unless there is consideration of these trends the inadequacy of vocational research and vocational training will become progressively more severe.

10. Look for and develop new research tools in program planning. According to Brandon and Evans[4] the basic tools for program planning in vocational education include community surveys, recommendations of local advisory committees and occupational analysis. While these approaches are still valid, workers mobility and changing occupational requirements demand that we look beyond our local job market and that future job analysis must be based on factors other than jobs or corporations.

11. Utilization of Research Studies done by industry, the armed forces, local and state government, etc. as well as the utilization of research techniques developed by economists, psychologists, and sociologists.

12. The utilization of the computer as a research tool.

In addition to these, I have personally phrased I also submit to you twelve specific suggestions for developing research personnel as delineated by Brandon and Evans in the 64th National Society for the Study of Education Yearbook.[5]

1. Early identification and stimulation of research interest and potential of professional personnel at all levels.

2. Deliberate, planned instruction in research in the professional preparatory and in-service programs of teacher

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[4] National Society for the Study of Education. 64th Yearbook, "Research in Vocational Education." p. 263

[5] op. cit. p. 271

3. Generous, research-encouraging provisions and standards in administrative regulations to make research-personnel-training eligible for employment in a multitude of research-personnel categories.

4. Provision of many formal and informal research activities to foster research interest, experience, and competency development.

5. Delineation of research-personnel classifications as aids, assistants, interns, technicians, and the like, and education and utilization of persons with research potential in appropriate classification.

6. Recognition of and granting credit for research experience not limited to that acquired in the field of education.

7. The stimulation of interest, participation and development of competency through grants, loans, scholarships, and fellowships specifically for research that may or may not have direct application.

8. Concentrated attention to broadened research activity (as differentiated from teaching and supervisory activity) in programs of college Seniors and graduate students.

9. Pre- and in-service program development of interdisciplinary research activities including research design, methodology, and experimentation employed in the major disciplines and professions.

10. Planned interdisciplinary seminars of varying degrees of sophistication and research understanding.

11. Realistic allocation of the work loads of supervisory and teacher-education personnel to permit developmental research activities and programs to be planned and carried forward.

12. Employment of interdisciplinary research talent and leadership to develop research and research personnel.

CONCLUSION

In conclusion, I reemphasize that the teacher educator is in a most critical position in terms of his ability to effect changes and determine the direction of vocational education. In a real sense he stands at the door through which future leaders in the field must pass.

I consider that the key points which have been expressed can be summarized as follows as a means of reemphasis.

1. Leaders in the field have recognized and spoken out forcefully regarding the need for an improvement of the quality of vocational research as well as an increase in the quantity. Because of his captive audience the teacher educator is in a unique position to convey the message.
2. The teacher educator must inspire his students to read widely and become obsessed with significant research findings, data, and statistics. This should not be done for the sake of whetting one's memory but as a means of molding his attitudes and strengthening his convictions about the need and directions of vocational research and programs.
3. The teacher educator must have a systematic plan for increasing research personnel.
4. Current and projected national problems must be considered as the basis for research topics as they may be expected to affect program planning and needs in vocational education.

As the teacher educator stands at the doorway to careers in vocational education and research he must stand tall; he must have the desire to see that his students are inspired to a degree that they will be nurtured beyond his fondest expectations. He must be aware that his students will need to have compassion, be people-oriented and have a desire to make the American dream become a reality for all of its people. He must have his pupil know that vocational education is not black or white but that it is "education for work."

And finally, the teacher educator would do well to instill within those with whom he works the message in this anonymous quotation. It is one which might give some directions toward more action research and program. It reads as follows:

> "If a man has a talent and cannot use it he has failed; if a man has a talent and uses only part of it he has partially failed; but if a man has a talent and can use the whole of it he has gloriously succeeded and won a triumph few men ever know."

DEVELOPMENT OF THE DEPARTMENT OF VOCATIONAL-TECHNICAL EDUCATION IN TEACHERS COLLEGE, MARSHALL UNIVERSITY

By

Robert B. Hayes
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Huntington, West Virginia

As I begin this paper permit me to admit that which will only too quickly become apparent to you. Although I have been in professional education for nearly twenty years I have only recently gotten more than cursory involvement in the area of occupational education. As a principal in the public schools of Kansas and as a student and teacher of the content of professional education I have had some acquaintance with the subject but not much more than one gets from the pages of a book. In 1965 when I returned to West Virginia my real education began. As I traveled around the state during the summer and fall of 1965 it became obvious that the curricula of these schools was much the same as they had been for several decades and that they were little different from those of the prep schools and suburban schools. The other observation was that too large a percentage of those who would complete a high school program would never go to college. As a dean I had further information which added to my education. Of the high school graduates who enter the college program for which I was responsible I found only 50% obtaining a degree. I recognized that those not obtaining degrees were little better prepared for the world of work than those who never entered college. This new awareness of the needs of my people and the inadequacies of the public school system of my state caused me to seek ways to aler the situation. It was this awareness and this desire to see the situation changed that started me to talking with the staff of the State Department of Education and to public school personnel to discover how the Teachers College for which I had administrative responsibility could be of assistance. Their guidance was not long in coming and I now have another department - the Department of Vocational-Technical Education - as a part of the Teachers College organization.

Let me tell you a little about my school to help you understand the setting for this new department. Teachers College is not large by the standards of many of your metropolitan institutions but it prepares approximately one out of three teachers for West Virginia. It has one of two graduate schools for the state with 286 masters degrees granted in 1970. Teacher education is the largest program in Marshall University with a graduating class which exceeds in numbers the total of the other three undergraduate colleges combined. This school is located in a tri-state area(West Virginia, Ohio and Kentucky) containing 260,000 people with a service commitment to the southern half of the mountainous state of West Virginia and the adjacent areas of Ohio and Kentucky. There are two small branch colleges in the heart of the southern coal fields for which the University is responsible and most of the on-campus students, 90%, come from Appalachia. In the past five years the staff of Teachers College has focused on getting out in the schools to precipitate change in curricula and methodology. Many members of the staff have assignments in the schools each term. We believe that the improvement of our state will come through education. We also believe that the improvement of the educational enterprise in our state depends upon the improvement of preparation programs for professional educators and for this we are responsible.

Expanding vocational-technical facilities and growing enrollments in occupational education programs, created in part by the Vocational Act of 1963 and the 1968 Amendments, have developed an acute need for additional instructors, supervisors, and administrators. Also the need for the upgrading of employed vocational educational personnel has been intensified by changes in occupations and by the emerging of new occupations. These developments have brought about the expansion of teaching staffs a part of which must be selected from those with little or no professional training and the assignment of experienced vocational teachers to supervisory and/or administrative roles for which they have little or no preparation. These influences caused concern at the state level and the administrator of the Division of Vocational-Technical Education began searching for a means to provide for a systematic program of professional development for vocational-technical personnel.

To aid in the search for the type of program needed in West Virginia Dr. Albert E. Jochen was engaged as a consultant. As a result of his study Dr. Jochen submitted three reports which provided guidance for the State Department of Education and for Marshall University as the program in vocational-technical education was developed. These reports

1. SUGGESTED DATA ESSENTIAL TO THE ESTABLISHMENT OF A DEPARTMENT OF VOCATIONAL-TECHNICAL TEACHER EDUCATION AND TRAINING AT A UNIVERSITY IN WEST VIRGINIA

2. SUGGESTIONS FOR DEVELOPING A COMPREHENSIVE PLAN FOR GRANTING A BACHELOR'S AND MASTER'S DEGREE IN VOCATIONAL-TECHNICAL EDUCATION

3. VOCATIONAL-TECHNICAL EDUCATIONAL CERTIFICATION

were instrumental in establishing the cooperative relationship which exists between the State Department of Education and Marshall University and in directing the staff of the University in the initial step taken to design the new Department of Vocational-Technical Education.

The West Virginia State Director of Vocational-Technical Education approached the Dean of Teachers College in the Fall of 1968 a few months after the submission of the Jochen Reports. He suggested that Teachers College submit to him a proposal for the establishment of a Department of Vocational-Technical Education at Marshall University. Proposals were developed, discussed and revised. The final revision called an Agreement For Services was submitted and signed in April 1969. In this Agreement the responsibilities of the two agencies, Marshall University and the State's Division of Vocational Education were outlined.

Marshall University agreed to

a. Recruit staff for the Marhsll University Department of Vocational-Technical Education.

b. Provide adequate facilities for the Department of Vocational-Technical Education.

c. Conduct research essential to the development and operation of the Department of Vocational-Technical Education.

d. Design the curriculum and develop course outlines to prepare administrative, supervisory, and teaching personnel to meet requirements for state certification, advanced degree, or additional credits in a comprehensive vocational-technical teacher education program.

e. Organize and conduct in-service professional improvement courses in vocational-technical education on the University campus and elsewhere as needed.

f. Develop a program to improve the instructional competencies of certificated vocational-technical education instructors.

g. Develop and provide a program of teacher preparation for skilled workers, technicians, and others who are or expect to be employed as vocational-technical teachers of short unit courses for out-of-school youth and adults.

h. Develop courses which will provide opportunities for educators to become conversant with the aims, objectives, and philosophies of vocational-technical education.

i. Prepare proposals under Title II, Vocational Education Leadership and Professional Development Amendment of the Higher Education Act of 1965, Part F, to meet the needs of vocational-technical education personnel for programs of leadership development, institutes, inservice education and other related programs.

j. Provide professional assistance including placement, counseling, and follow-up to students and graduates in vocational-technical education.

k. To cooperate with the Division of Vocational Education and local school personnel in determining vocational-technical teacher education needs and priorities.

The Division of Vocational Education agreed to

a. Act with the Dean of Teachers College in the planning, establishment and continued operation of the Department of Vocational-Technical Education.

b. Provide consultation and review of program and course development by the Department of Vocational-Technical Education.

c. Provide funding in the amount needed to develop and maintain a program of quality.

d. Join Marshall University in the project evaluation. The evaluation to be in terms of actual services provided according to the agreement and details outlined under the attached articles of agreement.

These responsibilities were outlined in more detail in the Articles of Agreement adopted by both agencies. These Articles of Agreement are subjected to review and revision for each contract period but they cannot be altered without the consent of both parties with less than six months notification. To date there have been only minor revisions and no conflict of any substance has arisen.

The Dean of Teachers College had the responsibility of the recruitment of the chairman for the new Department of Vocational-Technical Education. The selection was made in consultation with staff members in the State Department of Education and the new department had its beginning on July 1, 1969.

Initial activities of the Department have focused on continued study of the needs of vocational personnel, on preparation of a tentative plan and to make recommendations to assure maximum impact on occupational education in West Virginia and the surrounding region. The first course in the department will be provided in the summer of 1970.

As most of us know the ways outlined for getting things done in higher education often leave us perplexed if not totally frustrated. The maze created for initiating new programs or for getting a new course in the schedule takes a professional to master and he must have much time and patience. Many of the procedures are necessary to assure orderly progress but this does not make the task of building less difficult. Prior to the creating of a new department on the Marshall University campus there are several steps to be taken. Approval must be obtained from the Teachers College academic planning committee, the Graduate Council and the University's Academic Planning and Standards Committee. On-campus approval must come from the state's governing board for higher education. All these steps were taken before July 1, 1969, when Dr. Charles I. Jones, the department chairman, was employed. As Dr. Jones and his colleagues built the program they found that they had to seek approval of each course from the Teachers College Curriculum Committee, from the Graduate Council and from the Academic Planning and Standards Committee. At this date a part of this task has been completed.

To assure the designing of programs which would best serve the clientele for which it was designed Dr. Jones and his colleagues involved many persons in the developmental stage. In addition to the members of the Division of Vocational-Technical Education in the State Department of Education many on-campus and off-campus persons who would be in some way interested or involved in vocational-technical education were consulted. On campus staff members in home economics, business education and professional education were regarded as officially a part of the study group. Four out-of-state consultants were utilized for reviewing the initial plans of the Department.

Dr. Harold Binkley, Chairman
Division of Vocational Education
University of Kentucky

Dr. Joseph Nerden
Professor of Technical Education
North Carolina State University

Dr. Robert Reese, Chairman
Vocational-Technical Education
College of Education
The Ohio State University

Dr. Peter Haines, Chairman
Department of Vocation
Michigan State University

The first document produced by the Department was *A Plan to Provide Professional Education Opportunities for Vocational-Technical Personnel.* This publication was submitted to all on-campus committee members and all consultants. After a period of time for review the off-campus consultants were invited to campus individually to meet with the staff and committees. Each consultant was asked to submit a written critique as well as to meet for an extended period of time with the staff of the department and with a review committee. This interchange of ideas provided the basis for a revision of the original plan.

A second document was produced to be used by the on-campus committees which would be responsible for final review and approval of the program. The *Proposed Program of the Department of Vocational-Technical Education* provided material related to admissions, individual student program design and courses which were proposed. At this date the program is ready to receive its first enrollee but there remains much to be done.

We who are most directly involved with the development of this new program are determined that it shall not fall into the same restrictive pattern which binds most of higher education. Even with this determination we find ourselves confronted by many formidable problems. Not least among these problems are the restrictions imposed by our own thinking. We are products of the academic world and we find it difficult to break from our moorings. We are inclined to think in terms of our particular specialities, semester hours, on-campus classrooms, books and papers. Another problem relates to the experiences which are the basis for decisions of our colleagues. They like most of us in higher education have had little experience with the world of work and therefore have little understanding or appreciation for the needs of occupational education. These colleagues must accept or reject this new vocational-technical education program much of which differs with what they believe to be the very foundations of the academic world. We must be able to influence these persons to a change of attitude which will not only permit them to accept this Department of Vocational-Technical Education as equal to all others but also cause them to become involved in this effort to improve public education. We need not merely to lessen their opposition - we need their full support of the efforts to meet the educational needs of 60+% of our public school population.

Other problems we are confronting are related to designing a program which meets the criteria of relevance, comprehensiveness and flexibility. These three characteristics must apply to planning, implementation and evaluation of all our individual and departmental activities. We expect to depart from the usual format followed by institutions of higher education and we plan to use these three objectives as our guidelines.

To assure relevance we will

(1) give attention to the felt needs of the personnel to be served

(2) study the positions and responsibilities of the personnel to be served

(3) follow the current and emerging nature of man power needs in West Virginia and the contiguous states.

To provide comprehensiveness we will

(1) emphasize principles and practices common to all fields of vocational education rather than follow the categorical approaches of the past

(2) follow an interdisciplinary approach including concepts from psychology, sociology, economics, political science and other appropriate fields of study

(3) make study opportunities available to educators across the state

(4) utilize resources - personnel, library and facilities - wherever they can be found and adapted for use

(5) provide offerings which will permit all professional personnel to begin at their individual level and to advance at a rate and to a level suited to their needs and responsibilities.

To assure flexibility we will

(1) provide, insofar as it possible, for the diverse needs of educators throughout the state

(2) provide experiences as convenient to the personnel as possible.

(3) plan programs for individuals with needs, interests and education level of the enrollee as the guide

(4) schedule activities to the convenience of the majority of the enrollees rather than according to an academic calendar.

Maybe what I have just stated can be reiterated in a more succinct manner.

(1) We are using the needs of vocational-technical teachers as the basis for the curricula.

(2) We will utilize the entire state as the campus.

(3) We plan to employ any qualified person for the faculty regardless of his regular position.

(4) We will adapt any appropriate available space as the facility.

These plans represent a great departure for institutions in our area. We have tended to build walls around our campuses. We provide doors in the walls through which the select may come and after we have transmitted a portion of what we assume to be truth to them we provide letters which can be added to their names and we send them forth back through the gates to save the world. The only thing that has been wrong with this procedure is that it never did work well and it is totally inadequate for this age. A staff today that is not on the firing line is soon presenting obsolete material and a curriculum which has not been subjected to a review and change in the last thirty-six months is probably somewhat out-of-date. Never before have teacher educators had such a challenge and never before have the opportunities been so inviting. It is our day and we must make the most of it because for us there will not be another.

Let me just briefly review what I have attempted to discuss with you.

(1) West Virginia is attempting to meet the challenge of expanding vocational-technical education by improving training opportunities for professional personnel.

(2) An extensive effort has gone into the developing of programs to meet the needs of the professional vocational-technical educator.

(3) Marshall University has been selected to guide the effort within the state.

(4) The staff is attempting to avoid the trap of putting new wine in old bottles. New and different programs and course formats are being sought.

(5) Resistance is being met as some traditions of the academic world are being questioned.

(6) Relevance, comprehensiveness and flexibility are the guidelines for program and course development.

(7) We are attempting to focus our attention upon the opportunities for service to the masses of our people who will not graduate from degree oriented professional programs.

As I conclude this paper let me make a few recommendations to you.

(1) Vocational-technical educators must broaden their vision. Too much is made of the special categories in which you have found yourselves for the past forty years.

(2) Regard yourselves as educators of the highest order. No group in our professional society has a more important task than the one that is yours. Society will soon fully recognize this.

(3) Expect more of your colleagues in higher education. Institutions are made to serve men and colleges have neglected for too long the majority of our people. Get the many disciplines of higher education involved in your work.

WHAT THEY ARE SAYING ABOUT TEACHER EDUCATION

By

William S. Reynolds, Director
Vocational Technical Education Division
State University of New York College at Buffalo

I have been asked to draw together what appears to be the key recommendations that have been made during our four days of presentations and discussions, and to give my reactions to these suggestions. The interpretations and emphasis are my own and do not necessarily represent a consensus of this group of vocational technical leaders from the eastern United States.

Many educators, including some in the vocational technical area, would have us believe that our educational system is falling apart, that we are to blame for student unrest and half the other major world problems. I take the opposite view!

Education today is more exciting, more challenging, more interesting and more productive than ever in its history! We are: reaching more people, developing better facilities, improving the curricula, doing and using more research, and searching for better methods to effectively communicate with youth and adults. These activities represent the rebirth of education, not its decline! The very fact that we are at this Institute is an excellent example of the forward thrust of vocational technical education!

The major purpose of Institute V was to respond to the question "What changes are needed to improve the quality of teacher education in order to serve vocational education more effectively?"

Before we consider this question, perhaps it would be worthwhile to remind ourselves of our major purpose as teacher educators, supervisors or administrators. Too often we become engrossed with the mechanics of our profession and forget that our goal, simply stated, is to provide all youth with the maximum educational opportunity. Of course, we in vocational education should add "adults" to this goal. If this is true, then the criteria for educational decision making may be found by asking the question:

> "Will our action improve the educational opportunity for
> youth and adults?"

The thrust of this Institute is, "How can we improve teacher education in order to develop the maximum educational opportunity for youth and adults." I would like to discuss with you some of the major improvements needed, keeping this purpose in mind.

There seems to be three key areas of concern around which our discussion could center. These are:

1. The selection and admission of teacher candidates
2. The quality of the teacher education program
3. The need for research and development

Selection and Admission Procedures

Looking at the first of these topics, selection and admission of teacher education candidates, the initial approach relates to determining what the needs for teachers will be. Those who are involved in pre-service as well as in-service teacher preparation will need to make projections at least three years ahead. There are a number of ways to access vocational education teacher needs in any given area or state. Perhaps the most direct way is to ask the consumers of teachers. We use an annual survey at Buffalo which is sent to all of the vocational education administrators responsible for staffing. They are asked to indicate expected needs for each of the next five years in both the standard trades and those now developing.

Another source of data that may be helpful is to look at the projected manpower needs in the area served by the teacher education agency. Follow-up studies are helpful in determining the placement loss. Enrollment must take into consideration the percent of graduates who do not enter teaching after completing the program and those who may drop out.

After estimating the need for teachers, it is important to develop a recruiting plan. Prior to the expansion of vocational technical education under the 1963 and 1968 Acts, recruitment was often handled by the "amigo system." Today, we need more than word-of-mouth announcements about teacher vacancies. We should "go public" and let people know about the nature of and qualifications for becoming a vocational technical teacher. We need a continuing public relations program so that industry, trade organizations and other sources of candidates are aware of the opportunities of a teaching career in this special field.

A source of future candidates often overlooked is the vocational school. We need to explore ways to encourage outstanding high school students to plan for a teaching career through various types of work-study or internship programs.

The actual selection of candidates from a group of applicants is a difficult and often subjective process. Each state te ds to develop its own procedures. Most teacher education programs require candidates to have a high school (or equivalent) education, in-depth trade experience of several years, and an interview to access the candidates general potential as a teacher.

If we are to be more effective in the selection process, we must be more objective and use valid measuring instruments. Although education in general lacks reliable predicting instruments to determine who will or will not be an effective teacher, it is relatively easy to measure specific trade skills. The main deterrent in developing these tests has been the lack of adequate funds and a national cooperative effort. Furtunately a start is being made to overcome this gap. A study is now under way to develop some model national trade tests. When standardized trade tests become available, we will have a more accurate means to determine trade competency. Certainly time on the job alone is not an adequate indicator of skill and understanding. It is very possible to have one year of experience five times.

Interviews are used for a variety of purposes, but it would seem that this is an opportunity to inquire about the candidates interest in youth, his respect for the trades, and any obvious defects that would seriously limit his effectiveness as a teacher. Some candidates hope to escape from their trade or to retire to an easier job. Their potential may be seriously questioned.

Considering the fact that most vocational technical teacher education programs are now located at universities, the potential of the candidate to do college level work should also be examined. The typical college admissions tests geared to high school students may be inadequate for adults seeking entry into the vocational technical education program. Other types of tests appropriate for adults, such as the California Mental Maturity, will be more helpful in making reliable judgements.

Quality of the Teacher Education Program

Although considerable progress has been made in developing adequate teacher education programs in the last decade, the quality of the programs as reported in our Institute varies greatly. We seem to have agreed that a good basic program should at least include: courses relating to orientation to vocational technical education, job analysis and course organization, educational psychology, methods of teaching, evaluation of instruction, and student teaching.

What should be added to these basic ingredients? We can assume from the success of vocational technical education that these ingredients were adequate for their time, and we can also assume that what was appropriate 10 or even 5 years ago is not adequate for the 70's. Perhaps the greatest need for improving the teacher education program is in the area of developing courses and live experiences for understanding the nature of the disadvantaged youth. There is a shortage of qualified teacher educators in this field, so we must seek outside resources. In-service courses and experiences must be developed for the teacher of teachers in order to provide rapid dissemination of the appropriate knowledge and skills.

Efforts to prepare teachers to deal effectively with the problem of the disadvantaged have thus far been largely emergency and stop-gap in structure. The nature of the urban crisis required swift action, but now it is time to build the required content and experiences into the basic teacher education program. All teachers, and especially vocational technical teachers who have so much to offer these needy youth and adults, must be prepared to meet the challenge.

Someone mentioned here that vocational technical teachers tend to be somewhat provincial in their interest and background. Today's teacher faces youth who are exposed to a wide variety of high impact educational media. If the teacher is to be a teacher of the whole child, he must know more than the correct welding techniques or how to set up and punch out numerical control tape. He needs to listen to, understand and communicate with the "now" generation. He might even find that he can learn more about them by listening to their music! Whoever thought that such weird and funny names as the Beatles or Simon and Garfunkel could produce such beautiful music and lyrics?

Speaking of communication, this is an area where all too frequently the beginning vocational technical teacher has problems. His background as a skilled worker has not required a mastery of the language. It is imperative that the teacher education curriculum provide an opportunity for the beginning teacher to develop acceptable speaking and writing skills. The typical college freshman English course is in most cases unsuitable for vocational technical students. A communication course should be designed to meet their unique needs. This experience should be available early in the program with an opportunity for constant practice and evaluation during all other courses.

Another factor to consider in improving the basic program is the need to insure that the novice teachers understand the philosophy of vocational technical education as it relates to education in general. Special subject teachers, and others too, often become so absorbed in their "part" that they fail to see the whole fabric of education.

We have discussed many things during the past five days that would improve the quality of the content and organization of the program, but it seems that we have overlooked some of the more obvious aspects. A cooperative approach to development is needed. How many teacher education programs provide an opportunity for feedback from the vocational technical students? Every vocational technical teacher education department should have a student advisory council to provide both a sounding board and an opportunity for student participation in policy of concern to them. Students should be directly involved in improving the curiculum.

Community advisory councils, long a part of vocational education at the local level, need to be activitated at the college level. Opportunity for participation in improving the teacher education program should be extended to representatives from a variety of concerned groups including: vocational technical teachers, administrators, alumni, the state departments where appropriate, minority groups, unions, industry, and commerce. It would be worthwhile to have representatives from the liberal studies area of the college too, as they need to understand the unique purposes of our program.

As noted previously, we need to bring in specialists to help us develop programs in areas where we lack expertise. We urgently need curriculum consultants for developing programs relating to the urban and rural disadvantaged and the handicapped as a start.

The curriculum for preparing teachers should be under constant review. Teacher educators should resist the establishment of state education regulations which identify courses for teacher certification. Rigid regulations tend to limit curriculum development, experimentation and change. The colleges, in conjunction with appropriate advisory groups, should determine the curriculum.

The teacher education faculty should be encouraged to experiment with new techniques, methods and approaches such as: the use of video corders for lesson analysis and other purposes, micro lessons, internship patterns, broad area studies instead of subject blocks, computer assisted instruction and mixed media approaches. They should be knowledgeable about developments in educational technology and psychology that have implications for vocational technical teaching.

The teacher education program is no better than the talents of the faculty and administration. The program is a reflection of their abilities. The quality of the instructional staff is the key to an effective program. How can we improve the faculty (including administration)? We have agreed that the teacher education programs should be centered at colleges because of their many facilities for learning. It seems just as obvious that most of the faculty should be full time so that their major efforts are devoted to the task of preparing teachers. A part-time staff just does not have time for curriculum development, student counseling and all the other professional duties.

Another area relating to faculty development is recruitment. We need to select viable people with a variety of talents. They should have sufficient teaching experience so that they know and understand teenagers. They should have high level contemporary teaching skills and a willingness to study and grow in the profession.

The faculty should be provided with an opportunity to participate in policy decisions, to do research and to engage in educational experiments. They should be encouraged to conduct self evaluations and to accept student evaluation in appropriate areas.

The faculty is the best means of telling the rest of the college about the vocational technical program. They should be encouraged to develop communication links with other disciplines. In many cases it may be possible to develop some courses in the vocational technical division which would be appropriate to offer as all college courses, e.g., philosophy of technology, development of American industry.

Need for Research and Development

The list of needed research in our field is lengthy and there is much to be done despite substantial progress in recent years. Similarly, program development requires constant effort if we are to meet the critical needs of youth.

Perhaps the area that needs our most urgent attention now is the selection of teacher education candidates referred to earlier. We need to know the appropriate kind and length of trade experience required for becoming a knowledgeable trade teacher. Is it necessary to have a lengthy, e.g., seven years, experience or would three years be sufficient? Should required experience be identified "beyond the learning period" when we know that unions tend to inflate learning period requirements to limit trade entry?

Educational technology has made tremendous progress since World War II, but application of the technology to vocational technical education has been notably slow. Training directors in industry and commerce have generally been at the cutting edge in exploring the use of new and more efficient learning methods. They are basically concerned with two aspects - what will the method cost and will the learners achieve maximum skill and knowledge. Although education is just beginning to apply cost analysis techniques, we have not given serious concern to this aspect in the past. We need to learn how to effectively use the tools and methods that are now available including video tapes, film loops, audio cassettes, overhead projectors and programmed instructional materials. There are many combinations of these tools which would improve the efficiency of the teacher, and more important, facilitate learning by the student.

We need to experiment with new ways to keep teachers who have completed their teacher education programs abreast of current thinking in both their technical areas and teaching methodology. The "more course work" approach of in-service programs is the common answer, but not necessarily the most productive. Could programmed instruction, film loops, and various types of cross-media instruction be more effective in helping teachers improve instruction in areas in which they may be weak or out-of-date?

What of graduate program development; have we stayed too long with narrow curriculums aimed at preparing administrators and with "polishing" teachers? Should we be developing vocational technical teachers who can become specialists in working with the disadvantaged or the handicapped who can do basic applied research and will enjoy this activity, or who have special skills related to retraining adults? Are we attempting to identify outstanding students who show unusual leadership potential so that they may be encouraged to enter advanced degree programs?

Finally

As we strive to bring about the needed changes to fulfill the promise of vocational education, let us remember that:

> Vocational teachers in the public schools are different than training directors in industry,
>
> that
>
> they are not concerned with developing skill as their prime purpose,
>
> but
>
> they must be concerned with the total development of the child, as are all other public school teachers, so that he can lead a satisfactory and productive life.

All of us, as a result of this Institute, have become more accutely aware of changes we can make to improve our teacher education programs to provide better educational opportunities to youth and adults. Many of the ideas were not new, most are being experimented with in some fashion. I have faith that each of us will go back to our schools and make some of the changes recommended, especially in areas of our own programs we recognize as needing major improvements. There really is no other choice, if we uphold our responsibility to our youth.

OVERVIEW

Groups I & B

Constance McKenna, Instructor
University of Connecticut

In the early stages of discussion there was quite a bit of hesitancy on the part of some members of the group about making innovative recommendations which would pressure institutions to change currently established practices and accepted policies. However, after reaffirming the purposes of this institute, the group agreed to make whatever recommendation its members felt to be in the best interest of vocational education. These recommendations, then, would at least be available for consideration by those concerned with improving the quality of vocational teacher education.

The insights that members provided from their various professional perspectives helped us all to understand the total vocational education situation more clearly. The daily reports revealed a wealth of ideas exchanged in group meetings.

Concerning recommendations for change, there was a feeling of some pressure at times to "get it done in writing." Some of the philosophical discussion the group would have liked to carry further would have, by its nature, had to be rambling and, therefore, less productive in terms of printable output.

The one basic conflict in Group B related to the purpose of vocational education. The minority point of view was that vocational education is primarily job education. Therefore, the essential characteristics for successful teaching relate to job skill. The majority held that all education, including vocational education, should be for the enrichment of the total person - - that skills in human relations and interpersonal communication, and developing the individual's potential for total growth, are as important as providing a marketable skill. In spite of differences in specific instances, the group did arrive at a consensus.

New directions for vocational teacher education programs should be determined by the role vocational education is expected to play in the schools, secondary and post-secondary, serving target student populations. The primary focus of public education is to provide the student with skills necessary to survive in society. Vocational education shares this goal with general education and should be seen, not as something apart from general education, but an alternate route to acquiring the basic general educational background and social skills which will equip the student to function successfully in life's situations including a variety of jobs. Vocational education programs utilized for reaching these objectives should not be confined to traditional interpretations of programming or physical limitations of the school plant.

In summary, our discussion was very open - freely admitting divergent opinions - and the recommendations produced attest to the courage and dedication with which Group B approached its assigned task.

It was a privilege to work with these fine people and I'm happy to have had the opportunity, which this institute provided, to do so.

OVERVIEW

Groups II & A

Dr. R. W. Whinfield, Assistant Professor
University of Connecticut

As expressed earlier, the problems we were discussing are terribly complex and are impounded within very restrictive conditions. Some of the changes suggested would require rather massive readjustments by organization, administration, and programs which are strongly entrenched and deeply rooted in the past.

Yet many of the suggestions are possible. The extent to which they might improve the present situation is not really known, but they should be tried.

Even though Workshop A came up with rather generalized recommendations, for the most part, it was, in the opinion of most of the participants, very useful. The major problem was that few had had direct, meaningful experiences, or had limited experiences in dealing with programs in the metropolitan area. The discussion constantly hung on the full-time high school teacher and his environment, and to a considerable extent, was limited to the T & I teacher. The expectations of such a teacher assume such proportions as to be ridiculous-highly skilled (up-to-date on all aspects of his trade), be able to individualize instruction (in group), give guidance in vocational choice, conduct research, effect administrative changes, effect curricular changes from elementary through high school, be a community leader, understand and respond effectively to a multi-cultural environment - and more. Our ideals are admirable, but unattainable. Some of the problems we expect teachers to solve, or to be solved by an educational input, might better be done by administrative changes (policy revision, reordering of priorities, and other devices) than trying to incorporate the solution through teacher education programs. Some of these suggestions are incorporated in the recommendations. There is no reason why teachers and teacher educators should not try to influence such changes. (For example, certification should not restrict teacher education programs to limited parameters). Teacher educators should vigorously pursue such requirements as permit alternatives.

Great as Vocational Education traditions may be, we have to vigorously move in new directions, with greatly expanded dimensions and an open-mindedness we are not used to having.

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OVERVIEW

Groups III & C

Virginia A. Vespoli, Guidance Counselor
Hamden, Connecticut

An important realization overcame Group C as it was concluding its final workshop meeting. That realization resulted in a recommendation the group urged upon itself. I think it is an important general recommendation which, somehow, may be worked into the final report of the institute even though it may not fit under the three categories provided for recommendations. The wording of the recommendation is mine, but it does incorporate the feelings, thoughts, and even some of the phrases that came out of the group's concluding moments of discussion.

We recommend that as individuals each one of us must work to change the constricting attitudes toward vocational education that we encounter in our own personal sections of the world in which we work.

To do this we must make a greater personal effort to reach and sensitize the vast number of parents, general educators, school administrators, and guidance counselors who do not have the facts they need to adequately understand and appreciate vocational education opportunities for our youth.

Finally, there is one suggestion that occurs to me after having reviewed my notes of the institute. A well-planned and deliberate public relations effort needs to be made by vocational educators to improve the image of their product. In fact, some of the advertising methods and sales techniques used in business might be studied and adapted for use in developing wider public acceptance of vocational education. Could a future workshop in public relations for vocational educators be sponsored and funded under the existing legislation which pertains to vocational education?

Appendix D

OVERVIEW

Groups IV & D

Sidney Cohen, Consultant
State Department of Education
Hartford, Connecticut

The consensus of the group was that the Institute was helpful in focusing on the problems of education teachers and service personnel engaged in vocational education.

The problems of all states were similar and were being faced with varied approaches within the same framework.

Almost all participants had a sense of healthy, professional frustration throughout the institute because more problems were brought to the surface than could be solved in the limited time of an institute. The search for resources to help solve these problems is a continuing one. Few definitive answers were available for the problems facing vocational educators today, in spite of the urgency to develop new approaches for improved expanding vocational education system.

Most participants felt that the thrust of this institute, namely, to train professional personnel for vocational education more effectively, was most timely. However, it was felt that the colleges and universities were poorly equipped to provide training for vocational-technical fields that were constantly changing. Often change at colleges and universities to meet changing vocational-technical teacher education and training need was slowed down by their own slow-moving hierarchical attitudes and lack of understanding of vocational education by their administration.

Some general and vocational educators look with disdain at the educational efforts of OEO, OIC, JOBS, etc., and ignore the possibilities of these programs for innovative approaches to occupational training that may be developed. The almost unlimited federal funds per pupil available for such programs, in contrast to the limited per pupil funds available to vocational education, were often envied. In fact, limited funds, administrative restrictions, and vocational personnel's lack of authority, more often than know-how, prevented the development and institution of vocational education programs essential to serving the occupational needs of the total community. As a result, such organizations have taken over training areas that vocational education should have as their field of responsibility. Often these organizations impinge on areas being serviced within the field of vocational education and wasteful competition and duplication of effort and faculty often results. Vocational educators should be involved in the occupational education and training of all youngsters not going up the academic ladder to college, otherwise their function may be diminished by the efforts of outside agencies and a dual educational system may result.

A change in attitude toward vocational education and more knowledge concerning vocational education by all educational personnel is needed if education is to serve all of the people.

Urban areas have additional needs and it is necessary for the schools to cooperate with all agencies and services in structuring an educational delivery system that will benefit all persons in urban America. A positive attitude toward urban vocational-technical education by leadership personnel must be developed if a program is to be successful. Lack of vocationally oriented administrators will often vitiate a basically sound program. The vocationally competent personnel in major metropolitan cities should be vocationally oriented.

Change in business and industry is evolutionary and vocational education must change in a similar manner rather than with drastic periodic attempts to catch up.

Opportunities to hire vocational teachers and other professional personnel to meet the needs of new and developing industries must be kept open. Performance of vocational teachers should be considered of prime importance and should be tested first in competency examinations for which college credit may be given. These tests should be both academic and performance. The importance of maturity in a vocational education teacher is being revised in some states so that college training can substitute for part of the usual 5 to 9 years of trade experience.

Competency in the teaching situation, whether shop, related, classroom, or laboratory, should be the criteria for continuance of the teacher in the profession.

At time of hiring, and all during his tenure as a vocational teacher, the person should understand that he has an obligation to continue his education not only in the technical fields, but in the so-called "cultured areas." A teacher has the responsibility to the profession of teaching, not only to teach a skill, but to prepare all his students to participate as citizens, responsible individuals, and as members of families.

Teachers require special education in identifying and handling the disadvantaged, the handicapped, and students with other educational disabilities.

In urban areas all teachers have the particular need for a basic understanding of the nature of being handicapped and its impact on the educational performance of students. This should be part of the basic training of all teachers as well as teachers in vocational education.

Practical experience in areas of study for the disadvantaged and the handicapped is required if teaching is to be successful.

Introductory courses in guidance, academic and occupational, should be included in its pre-service and in-service training of vocational teachers in order to give them fundamental concepts and philosophies.

Education must realize its limitations. There are conditions beyond the scope of education as it is presently organized and other specialists from various disciplines should be called in to help.

Trainers of vocational education teachers have the obligation and professional responsibility to use the best methodology in their presentation of course material and use the best practices available in their areas of instruction, including use of audio-visual materials, programmed instruction and evaluation.

UNIVERSITY OF HARTFORD   West Hartford, Connecticut 06117

November 30, 1970

Dear Participant:

It is now approximately six months since you attended the institute dealing with "Improving the Preparation of Professional Personnel for Vocational Education in Metropolitan Areas." The recorders have culled many significant recommendations from your discussions. As the evaluations indicated and as I mentioned in the closing remarks, it was the quality and active involvement of the participants which made this institute so meaningful.

It would be helpful to learn just to what extent you have been able to put into effect some of the ideas formulated and discussed at this institute. Being aware of the short span of time and the limited activity possible during July and August, we are also interested in any action that you plan to initiate by December 31, 1971.

Enclosed you will find a questionnaire seeking some identification of changes instituted, attempted, or planned. By omitting responses to specific items you can indicate that you have not instituted, attempted, or planned to take such action, whether it is because of your position toward this item or because of your inability to institute such a change. In addition, we would like some general evaluation of the two instruments used at the close of the institute.

Your responses will be treated confidentially and will be summarized without any individual identification. Feel free to add any comments that you may wish.

In order to include the findings of this follow-up questionnaire in the final report, only those responses received by December 18 will be included in the summarization. Please complete the questionnaire and return in the self-addressed stamped envelope before you become overwhelmed in your regular workload.

I wish to express my personal appreciation for your participation and wish you professional and personal success.

Sincerely,

H. Righthand

Herbert Righthand
Project Director

HR/net

Enc.

UNIVERSITY OF HARTFORD West Hartford, Connecticut 06117

IMPROVING THE PREPARATION OF PROFESSIONAL PERSONNEL FOR VOCATIONAL EDUCATION IN METROPOLITAN AREAS

University of Hartford, 200 Bloomfield Avenue, Hartford, Connecticut

Sponsored and Coordinated by the Division of Vocational Education,
College of Education, Temple University, Philadelphia, Pennsylvania
Under U.S.O.E. Grant 9-0535

Subject: Short Term Institutes for In-Service Training of Professional Persons Responsible for Vocational-Technical Education in Eastern Metropolitan Areas

Institute #5

Follow-up
Evaluation Form #III

Name: ______________________________

On the lines below, check or write in whatever actions you have taken, attempted or planned as a result of your participation at this institute.

Action	Accomplished	Attempted	Planned
Use institute participants as consultants	____	____	____
Conduct further study or investigation	____	____	____
Reported some of the institute concepts to colleagues	____	____	____
Modified personnel practices	____	____	____
Modified teacher education curriculum	____	____	____
Changed certification requirements	____	____	____
Conducted meetings or conferences to discuss some of the information obtained	____	____	____
Revised pre-service teacher training program	____	____	____
Expanded and/or modified in-service program	____	____	____
Prepared a written report on institute	____	____	____
Gave a verbal report on institute outcome	____	____	____
Other: ______________________	____	____	____
______________________	____	____	____
______________________	____	____	____
______________________	____	____	____

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Follow-up
Evaluation Form III
Page 2

If some attempts to introduce changes were not successful, please indicate possible reasons:

1. Limited funds ______
2. Rejection by administration ______
3. Little support from colleagues ______
4. Reconsideration or modification of change ______
5. Lack of time ______
6. Limits of your position for introducing changes ______
7. Other:________________________________ ______
8. Other:________________________________ ______

Several instruments for evaluation were presented at the institute, please indicate your reaction to these by circling appropriate response:

Institute Evaluation Form #1 Pre-test/post-test (Vocational Education Attitudes)

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1. This evaluation instrument was relevant to the Institute objectives	SA	A	U	D	SD
2. The items in this instrument were generally clearly stated	SA	A	U	D	SD

Institute Evaluation Form #II

1. This evaluation instrument was relevant to the Institute objectives	SA	A	U	D	SD
2. The items in this instrument were generally clearly stated	SA	A	U	D	SD

APPENDIX F

Distributed Resource Materials

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Miller, John G. Predictive Testing for Entrance in Vocational-Technical Schools. New York University; Center for Field Research and School Services, 1968.

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